

13B3  
NSD 002 325074



June 30, 2005

Mr. Frank Faranca  
Case Manager, Bureau of Publicly Funded Site Remediation  
New Jersey Department of Environmental Protection  
401 E. State Street P.O. Box 028  
5th Floor West  
Trenton NJ 08625-0028

RE: NJPDES-DGW Permit 0086487 Effective March 1, 2000

Dear Mr. Faranca:

Two copies of the Discharge to Groundwater Report consisting of one (1) T-VWX-014, seven (7) VWX-015 Groundwater Analysis – Monitoring Well reports and report Sections 1.0 through 8.0 for the April through June 2005 quarter are enclosed.

Detection Monitoring was performed in accordance with Part 4-DGW Table 2, using the Ground Water Sampling and Analysis Plan approved in April 1996.

Lenox inspection logs were reviewed and a summary of the logs for the quarter is enclosed.

The “Mann-Whitney U-Test” statistical analysis of the ground water TCE results from the five (5) sentinel wells over eight (8) sampling quarters was rolled forward twenty-three (23) quarters to cover the April 2005 data and is included in section 7 of the report. The null-hypothesis is accepted for sentinel wells MW-75, MW-76, MW-77, MW-78 and MW-79A and we cannot statistically conclude that the TCE concentrations are decreasing for the twenty-third (23<sup>rd</sup>) quarter’s data set. In addition, MW-75 has been non-detect for the past twenty-three (23) consecutive quarters.

The **bold** data in the tables denotes elevated results, which exceed the site-specific GWQC’s for lead (10ug/l) and zinc (36.7 ug/l) as determined by calculating their arithmetic means from data reported in a 3-year study. Trichloroethylene levels are compared to the New Jersey limit of 1.0 ppb. Please note:

- MW-3 showed elevated levels of total and dissolved lead, while MW-4, MW-72 and MW-73 showed elevated levels of total lead but not dissolved lead.
- MW-3, MW-15, MW-17, MW-25, and B-31, showed elevated levels of both total and dissolved zinc, while MW-72 and MW-74 showed elevated levels of total zinc but not dissolved zinc;

Mr. Frank Faranca

651292



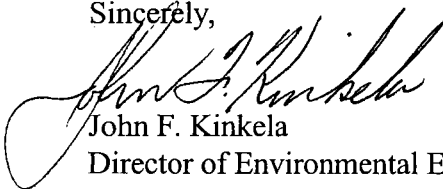
Mr. Frank Faranca  
June 30, 2005  
Page 2

Re: NJPDES-DGW Permit 0086487 Effective March 1, 2000

- Of the Twenty-three (23) wells sampled for TCE this quarter, nine (9), were higher than the last time they were sampled: MW-12S, MW-12D, MW-25, B-31, B-59, B-66, MW-76, MW-78 and MW-81. Nine (9) wells decreased: MW-10, MW-15, MW-23, B-32, B-53, B-54, B-71, MW-77, and MW-79A. Five (5) wells: MW-1, MW-13, MW-14D, MW-75 and MW-80 remained essentially the same;
- TCE was elevated in three (3) of the five (5) downgradient sentinel wells, MW-77, MW-78 and MW-79A at 1.8, 2.2 and 5.5-ug/L, respectively. Two (2) of these sentinel wells decreased slightly;
- The volatile organic compound cis-1, 2-dichloroethene was detected in seven (7) wells: MW-10, MW-12S, B-31, B-32, MW-77, MW-78 and MW-79A. Trans-1,2-dichloroethene was detected in MW-79A. TCE daughter species were not detected in any other wells;
- The Monthly Daily Average Flows for the quarter were 354,290 -gallons per day for March 2005, 351,906 -gallons per day for April 2005 and 348,870 -gallons per day for May 2005;
- GAC Treatment System influent and effluent unfiltered water samples contained elevated total zinc at 66.4-ug/L, and 519-ug/L respectively. The filtered influent and effluent water samples contained elevated zinc at 63.5-ug/L and 319-ug/L - respectively. The zinc is attributed to the higher zinc levels observed in B-31 and, previously, other wells. ;
- The No TCE daughter compounds were detected in the GAC Treatment System influent, mid or effluent water samples;
- Lead was detected, at less than an elevated level, in the GAC Treatment System, unfiltered effluent water sample;
- TCE and cis-1, 2-dichloroethene were detected below the New Jersey MCL's of 1.0 ug/l and in only one (1) of the three (3) residential, downgradient wells sampled.

Please call (609) 965-8272 if there are any questions.

Sincerely,



John F. Kinkela  
Director of Environmental Engineering

Enclosures    -Pomona DGW and TCE Quarterly Groundwater Monitoring Report – April 2005  
Monitoring Round  
-Summary of Inspection Logs – April through June 2005 Quarter

bcc: J.H. Ennis (w/attachments)  
L.A. Fantin, Lenox (w/attachments)  
~~Andrew Park (w/attachments)~~>  
File

## SUMMARY OF INSPECTION LOGS

Quarter April 2005 – June 2005

**Facility:** Glaze Basin Cap      **Type:** Asphalt Paving

**Inspections:** Monthly      **Required:** Monthly

**Repairs/Maintenance:** NA

**Condition:** Excellent condition

**Remarks:** Repaved

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**Facility:** Slip Mound Cap      **Type:** Membrane with soil and vegetative cover - mounded

**Inspections:** Monthly      **Required:** Monthly

**Repairs/Maintenance:** None

**Condition:** Vegetative cover is in good condition and no erosion was noted. Protective guard rail in good condition.

**Remarks:** None.

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**Facility:** Nine (9) RCRA Monitoring Wells      **Type:** N/A

**Inspections:** Monthly      **Required:** Monthly

**Repairs/Maintenance:** None

**Condition:** All wells in good condition, except MW-1 has a broken hinge on the outer casing and MW-10 needs a new cap on the inner casing (cross-threaded).

**Remarks:** Sampled MW's 1, 3, 4, 6, 9 and 10 in April

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## SUMMARY OF INSPECTION LOGS

Quarter April 2005 – June 2005

**Facility:** Seven (7) Recovery Wells

**Type:** N/A

**Inspections:** Monthly

**Required:** Monthly

**Repairs/Maintenance:** None

**Condition:** All wells intact and secure. RW-1, not in use.

**Remarks:** None

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**Facility:** Polishing Basin

**Type:** N/A - Closed

**Inspections:** Monthly

**Required:** Monthly

**Repairs/Maintenance:** N/A

**Condition:** Clean closed. Vegetative cover is in place, no erosion noted.

**Remarks:** None.

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**Facility:** Tilton Pond

**Type:** Earth Dike, Unlined

**Inspections:** One time per day

**Required:** Monthly

**Repairs/Maintenance:** SWMU closure delayed until Summer 2005 due to high groundwater. Current groundwater levels are still high.

**Condition:** Vegetative cover on berms is in good condition and no erosion was noted. No industrial waste discharge to pond since August 1992. No overtopping controls required as pond is permitted to discharge non-contact cooling water and stormwater to surface water under NJPDES-DSW Permit #0005177.

**Remarks:** As industrial wastewater no longer flows through pond, final cleaning and sampling are planned, when groundwater is low, to effect clean closure.

SUMMARY OF INSPECTION LOGS

Quarter April 2005 – June 2005

**Facility:** Sludge Disposal Area      **Type:** Asphalt Paving

**Inspections:** Monthly      **Required:** No

**Repairs/Maintenance:** None.

**Condition:** Asphalt and fence in excellent condition.

**Remarks:** None

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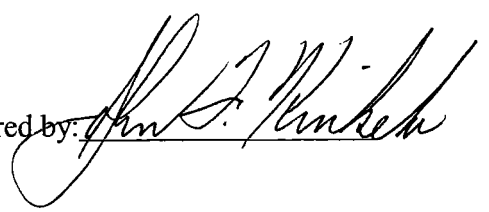
**Facility:** Area of Concern      **Type:** Asphalt Paving, Membrane Cap & Fence

**Inspections:** Monthly      **Required:** No

**Repairs/Maintenance:** None.

**Condition:** Asphalt and fence in excellent condition.

**Remarks:** None

Prepared by: 

Date: 6-30-05

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER RESOURCES

Form T-VWX-14

**MONITORING REPORT - TRANSMITTAL SHEET**

NJPDES No.

0086487

REPORTING PERIOD

MO YR MO YR

0405 thru 0605

**PERMITEE:**

Name LENOX INCORPORATED

Address 100 LENOX DRIVE

LAWRENCEVILLE, NEW JERSEY 08648

**FACILITY:**

Name LENOX CHINA, A DIVISION OF LENOX INCORPORATED

Address TILTON ROAD

POMONA, NEW JERSEY 08240

(County) ATLANTIC

Telephone (609) 965-8272

**FORMS ATTACHED (Indicate Quantity of Each)**

**SLUDGE REPORTS - SANITARY**

☐ T-VWX-007 ☐ T-VWX-008 ☐ T-VWX-009

**SLUDGE REPORTS - INDUSTRIAL**

☐ T-VWX-010A ☐ T-VWX-010B

**WASTEWATER REPORTS**

☐ T-VWX-011 ☐ T-VWX-012 ☐ T-VWX-013A

**GROUNDWATER REPORT (As per permit)**

☒ VWX-015 ☐ VWX-016 ☐ VWX-017

**NJPDES DISCHARGE MONITORING REPORT**

☐ EPA FORM 3320-01

**OPERATING EXCEPTIONS**

YES NO

DYE TESTING

☐ ☐

TEMPORARY BYPASSING

☐ ☐

DISINFECTION INTERRUPTION

☐ ☐

MONITORING MALFUNCTIONS

☐ ☐

UNITS OUT OF OPERATION

☐ ☐

OTHER

☐ ☐

(Detail any "yes" on reverse side  
in appropriate space.)

**AUTHENTICATION -**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment

**LICENSED OPERATOR**

Name \_\_\_\_\_

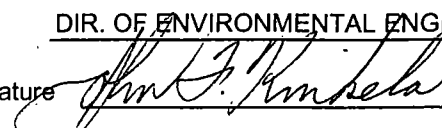
Grade & Registry No. \_\_\_\_\_

Signature \_\_\_\_\_

PRINCIPAL EXECUTIVE OFFICER or  
DULY AUTHORIZED REPRESENTATIVE

Name JOHN F. KINKELA

Title DIR. OF ENVIRONMENTAL ENGINEERING

Signature 

[illegible]



## Form VWX-15A

## PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID No. MW-3

FACILITY NAME

LENOX CHINA

SW ID No.

LAB NAME

ACCUTEST, DAYTON, NJ

SAMPLE DATE

NJPDES No.

WELL PERMIT No.

YR MO DAY

NJ LAB CERT No.

WQM USE

**S** NJ **0 0 8 6 4 8 7**

3	6
---	---

9

0	3	0	2	7
---	---	---	---	---

9  
16

0	5	0	4	2	1
17			22		

1	2	1	2	9
23				27

28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM

| 0 | 4 | 0 | 5

| 0 | 6 | 0 | 5

MO YR

MO YR

**SUBMIT WITH SIGNED T-VWX-014**

J F M A M J J A S O N D  
A E A P A U U U E C O E  
N B R R Y N L G P T V C

## ANALYSIS

UNITS

### PARAMETER

VALUE

## REMEMBER

[illegible]

RE

/





N B R R Y N L G P T V C										ANALYSIS	UNITS	PARAMETER					VALUE					M	
X			X			X				Elev. of top of well casing with cap off (as specified in well completion report)	feet Msl: to nearest 0.01	7	2	1	1	0		6	3		5	1	
X			X			X				Elev. of original ground level (as specified in well completion report)	feet Msl: to nearest 0.01	7	2	0	0	9		6	2		0	0	
X			X			X				Depth to water table from top of casing prior to sampling (with cap off)	feet: to nearest 0.01	8	2	5	4	6			4		8	8	
X			X			X				Depth to water table from original ground level prior to sampling	feet: to nearest 0.02	7	2	0	1	9			3		3	7	
X										Sodium, Total	mg/l as Na	8	0	2	3	5							
X			X			X				Lead, Total	ug/l as Pb	0	1	0	5	1			3		0		K
X			X			X				Zinc, Total	ug/l as Zn	0	1	0	9	2		2	0		0		K
X										Sodium, Dissolved	mg/l as Na	8	0	2	3	5							
X			X			X				Lead, Dissolved	ug/l as Pb	0	1	0	5	1			3		0		K
X			X			X				Zinc, Dissolved	ug/l as Zn	0	1	0	9	2		2	0		0		K
X										Total Dissolved Solids	ppm	7	0	3	0	0			2	3	4		
X			X			X				Color	pt-co	0	0	0	8	0			5		0		K
X			X			X				pH	std. units	0	0	4	0	0			5		3	1	
X			X			X				Conductance, Specific	umhos/cm	0	0	0	9	5			3	0	6		
X			X			X				Dissolved Oxygen	mg/l								0		5	0	
X										Sulfate, Dissolved (as SO4)	mg/l	0	0	9	4	6							

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER RESOURCES

CN 029  
Trenton, New Jersey 08625-029

SAMPLE COLLECTION AND PRESERVATION FORM  
(To be completed by sampling crew)

BACKGROUND

- 1) Facility Name: Lenox China
- 2) NJPDES Number: NJ0086487
- 3) Facility Address: Tilton Road, Pomona, NJ 08240
- 4) Owner's Name: Lenox China
- 5) Owner's Address: Tilton Road, Pomona, NJ 08240

SAMPLING PLAN

- 6) Has a sampling and analysis plan been developed for this facility as stipulated under N.J.A.C. 7:14A-6.9?  
Yes X or No \_\_\_\_\_
- 7) If yes, has the sampling plan been approved by the Department?  
Yes X or No \_\_\_\_\_
- 8) If the sampling plan has not been submitted to the Department, attach with these submitted forms.

SAMPLE COLLECTION

- 9) Sample Date/Time: 4/20/05-4/21/05
- | 10) Sampling Personnel (Name/Title) | Affiliation                  | Phone               |
|-------------------------------------|------------------------------|---------------------|
| <u>Robyn Myhre, Hydrogeologist</u>  | <u>Gannett Fleming, Inc.</u> | <u>609-279-9140</u> |
| <u>Suzy Kelly, Staff Engineer</u>   | <u>Gannett Fleming, Inc.</u> | <u>609-279-9140</u> |

- 11) Weather conditions at the time of sampling: Sunny, 70 degrees F  
\_\_\_\_\_
- 12) Is there a designated level of protection, and if so, indicate:  
A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_ or D X \_\_\_\_\_

STATIC WATER LEVEL MEASUREMENT AND WELL EVACUATION

- 13) What method was utilized to determine the static water level?  
Electrical (m-scope) X \_\_\_\_\_ Stainless Steel Tape \_\_\_\_\_  
Sonic \_\_\_\_\_ or Other \_\_\_\_\_: (explain) \_\_\_\_\_
- 14) Measuring Device Precise to: 0.01 feet \_\_\_\_\_
- 15) Model Number: 101 Manufacturer: Solinst \_\_\_\_\_
- 16) Was the water level indicator deconned between wells?  
Yes X \_\_\_\_\_ or No \_\_\_\_\_
- 17) Describe the decontamination procedure: Deionized water rinse, wipe with paper towel, final deionized water rinse, air dry \_\_\_\_\_
- 18) Wells are to be purged three to five times prior to sampling. If wells are not purged as stated above, explain and justify the exact purge method used.  
N/A \_\_\_\_\_
- 19) Method used for well evacuation: Pump X \_\_\_\_\_ or Bailer \_\_\_\_\_
- 20) If bailed to evacuate, what are the dimensions of the bailer?  
N/A \_\_\_\_\_
- 21) What is the volume capacity of the bailer? N/A \_\_\_\_\_
- 22) Pump Type: Submersible \_\_\_\_\_ Bladder \_\_\_\_\_ Gas Piston \_\_\_\_\_  
Gas Displacement \_\_\_\_\_ or Other X \_\_\_\_\_  
Explain: Peristaltic Pump \_\_\_\_\_
- 23) Pump Model Number / Flow Rate: Randolph Pump Model 750/1-6 gpm \_\_\_\_\_
- 24) Pump manufacturer: Randolph-Austin \_\_\_\_\_
- 25) Describe decontamination method used to clean pump between wells:  
None - A new piece of tubing was used at each monitoring well \_\_\_\_\_



- 28) Refer to the following chart for volume capacities for various wells per linear foot.

<u>Casing Diameter</u>	<u>Gallons/Linear Foot</u>
2"	0.16
4"	0.65
6"	1.47
8"	2.61

- 29) Complete the below chart regarding evacuation measurements. Please note the following abbreviations:  
TOC=elevation of top of casing; TDW=total depth of well from  
from top of casing; DTW=distance to water from top of casing;  
# of bail vols=number of bail volumes. TOC, DTW, and TDW  
Should be measured and/or calculated to the nearest 0.01 foot.  
Also note that if a mechanical pump is used for purging,  
indicate the total minutes of pumping time below. If a bailer  
is used for purging, indicate the total number of bail volumes.  
Attach additional sheets if necessary.

SEE TABLE QAQC1 ON PAGE 3A

[illegible]

**Table QAQC1**  
**State of New Jersey**  
**Department of Environmental Protection**  
**Division of Water Resources**  
**Groundwater Sampling Data Collected April 20-21, 2005**

Well Permit Number	Owners Well Number	TOC (Feet)	DTW (Feet)	TOC-DTW (Feet)	TDW (Feet)	Gallons per linear foot	Amount of Water in Casing (gallons)	Amount of Water Purged (gallons)	Number of Bail Volumes	Minutes pumping time	Time purge completed	Time sample collected
36-03025-2	MW-1	69.28	8.68	60.60	29.75	0.65	13.7	42	-	14	12:30	12:30
36-03027-9	MW-3	67.09	7.38	59.71	30.40	0.65	15.0	45	-	13	11:34	11:34
36-03119-4	MW-4	66.98	5.28	61.70	26.80	0.65	14.0	42	-	11	12:05	12:05
36-02913-0	MW-5	64.17	6.57	57.60	17.95	-	-	Not Sampled	-	-	-	-
36-03270-1	MW-6	65.08	6.17	58.91	30.75	0.65	16.0	50	-	14	10:20	10:20
36-07160-9	MW-9	69.51	10.30	59.21	31.15	0.65	13.6	41	-	11	11:12	11:12
36-07161-7	MW-10	63.51	4.88	58.63	29.30	0.65	15.9	50	-	12	10:48	10:48

SAMPLE COLLECTION AND PRESERVATION

- 30) Matrices Sampled:  
Aqueous: Potable Well\_\_\_\_\_ Monitoring Well X  
Surface Water\_\_\_\_\_ Leachate\_\_\_\_\_ Other\_\_\_\_\_  
Nonaqueous: Soil\_\_\_\_\_ Sediment\_\_\_\_\_ Other\_\_\_\_\_
- 31) Dedicated Hose: Yes X or No\_\_\_\_\_
- 32) Hose Construction: PVC\_\_\_\_\_ Teflon\_\_\_\_\_ Tygon\_\_\_\_\_  
Butyl\_\_\_\_\_ Other X Explain: Drinking water grade polyethylene
- 33) Sample Collection: (Time of collection for each well/sample should be indicated on the back of this page) See table QAQC1 on page 3A  
A) Bailer-construction: Teflon\_\_\_\_\_ Stainless Steel\_\_\_\_\_  
PVC\_\_\_\_\_ HDPE X  
B) Beacon Bomb Sampler\_\_\_\_\_ Size:\_\_\_\_\_ oz.  
C) Other\_\_\_\_\_ Explain:\_\_\_\_\_
- 34) Lines used to lower bailer: Stainless Steel\_\_\_\_\_  
Cable/Leader\_\_\_\_\_ Teflon\_\_\_\_\_ PVC Rope\_\_\_\_\_ Other 100% poly
- 35) Are dedicated bailers used for each well? Yes X or No\_\_\_\_\_
- 36) Are bailers: Laboratory cleaned\_\_\_\_\_ Laboratory Name\_\_\_\_\_  
Field Cleaned\_\_\_\_\_ Describe method:\_\_\_\_\_  
Disposable bailers used only once then discarded.
- 37) Prior to use, are bailers, sample bottles, hoses, etc. Kept clean i.e., not placed in direct contact with ground, etc.:  
Yes X or No\_\_\_\_\_
- 38) Are sample bottles supplied by laboratory? Yes X or No\_\_\_\_\_
- 39) Are sample preservation instructions supplied by laboratory?  
Yes X or No\_\_\_\_\_
- 40) Are sample preservatives supplied by laboratory? Yes X or No\_\_\_\_\_

## 41) Sample Preservation:

Constituent	Teflon top in contact with sample	Head Space	Refrig- erated	Acidified	Alkanized	Bottles
Volatile Organics	Yes	No	Yes	Yes	N/A	N/A
TOX	N/A	N/A	N/A	N/A	N/A	N/A
Extractable Organics	N/A	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	Yes	Yes	N/A	N/A
Cyanide	N/A	N/A	N/A	N/A	N/A	N/A
Phenols	N/A	N/A	N/A	N/A	N/A	N/A
Biological	N/A	N/A	N/A	N/A	N/A	N/A

42) Indicate below any other constituents to be analyzed and their forms of preservation: TDS, TSS, color - refrigerated

43) Were samples for metals analysis filtered in field? Yes X or No \_\_\_\_\_

44) Were samples for metals analysis filtered in laboratory? Yes \_\_\_\_\_ or No X

45) Were field blanks taken? Yes X or No \_\_\_\_\_

46) Were trip blanks taken? Yes X or No \_\_\_\_\_

47) What parameters/analysis were performed on field and trip blanks?  
 Volatile Organics X (FB, TB) Semi-volatile \_\_\_\_\_ Pesticides \_\_\_\_\_  
 PCBs \_\_\_\_\_ Metals X (FB) Other TDS, TSS, color (FB)

48) Prior to sampling, was an equipment blank performed? Yes \_\_\_\_\_  
 No X Sampling equipment is dedicated per well.

49) Prior to sampling each well, are disposable gloves worn?  
 Yes X or No \_\_\_\_\_

50) If yes, are the gloves changed between wells? Yes X or No \_\_\_\_\_

CHAIN OF CUSTODY

- 51) Laboratory Name/Certification Number Accutest / 12129
- 52) Laboratory Address 2235 Route 130, Dayton, New Jersey 08810
- 53) Laboratory receipt date and time 4/21/05, 15:55
- 54) Attach Chain of Custody: Yes X or No \_\_\_\_\_

Sample Number	Relinquished by	Received by	Time	Date	Reason for change of custody
MW-1, MW-3, MW-4, MW-6, MW-9, MW-10, MW-2, FB, TB	R. Myhre	Accutest	15:55	4/21/05	Relinquished to lab

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information contained in this report, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete and meets the description specified in N.J.A.C. 7:14A-2.5(a)10, and 6.1 through 6.12. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Sampler

Name/Title (printed) Robyn Myhre, Hydrogeologist

Signature Robyn Myhre Date: 4/29/05

Company Name and Address Gannett Fleming, 202 Wall Street, Princeton, NJ 08540

## Notes:

1. The sampling team may use their own reporting forms only if the forms contain all the information required in this sample collection and preservation form.
2. If any of the items within this sample collection and preservation form vary for different monitor wells, the information must be documented within this form or as attachments to this form.

QAQC-B  
Page 1 of 3

Relinquisher of sample: (please print)

Date: 4/21/05 Time: 15:55

Laboratory Name: Accutest

Date: 4/21/05 Time: 15:55

If no, which analyses will be affected: \_\_\_\_\_

Was the septum in place with the TFE side down? Yes X No

N 967-87

Sample Preparation Chemist

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Other			
8. Other			
9. Other			

Analyst

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Volatiles	<u>Michael Grosso</u>	<u>Michael Grosso</u>	<u>5/18/05</u>
8. TOC			
9. TOX			
10. Phenols (total)			
11. Cyanide (total)			
12. Other			
13. Other			
14. Other			
15. Other			



N 967-87

Sample Preparation Chemist

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals	Julie Hong	Julie M. Hong	5/3/05
7. Other			
8. Other			
9. Other			

Analyst

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals	Nancy Duan	Nancy Duan	5/4/05
7. Volatiles			
8. TOC			
9. TOX			
10. Phenols (total)			
11. Cyanide (total)			
12. Other			
13. Other			
14. Other			
15. Other			

N 967.87

Sample Preparation Chemist

Name please print

Signature

Date

1. Base/Neutrals
2. Acids
3. Pesticides
4. Herbicides
5. PCB's
6. Metals
7. Other
8. Other
9. Other

Analyst

Name please print

Signature

Date

1. Base/Neutrals
2. Acids
3. Pesticides
4. Herbicides
5. PCB's
6. Metals
7. Volatiles
8. TOC
9. TOX
10. Phenols (total)
11. Cyanide (total)
12. other (Color)
13. other (TSS)
14. other (TDS)
15. Other

Hel Magallon

Kobel Carter

Kobel Carter

Hel Magallon

Kobel Carter

Kobel Carter

9/23/05

N 96787

Page 3 of 3

Did any of the sample extractions and/or analyses exceed holding times? Yes \_\_\_\_\_ No X

If yes, which analyses will be affected:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If re-extraction and/or re-analysis is necessary, indicate the reason and attach another Laboratory Chain of Custody/Chronicle with the appropriate signatures and dates.

Quality Assurance Officer

Name (please print)

David N. Spers

Signature

David N. Spers

Date

19 May 05

LABORATORY AUTHENTICATION STATEMENT FOR NJPDES  
COMPLIANCE MONITORING

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality control requirements specified in N.J.A.C. 7:18, 40 CFR 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.



---

Laboratory Manager (as defined in N.J.A.C. 7:18)



**ACCUTEST.**  
Laboratories

# CHAIN OF CUSTODY

2235 Route 130, Dayton NJ 08810  
TEL. 732-329-0200 FAX: 732-329-3499/3480  
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #

Client / Reporting Information				Project Information				Requested Analysis																Matrix Codes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Project Contact <i>Robyn Myhre</i> E-mail				Project # <i>45838.001</i>																				SW - Surface Water																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Accutest Sample #	Field ID / Point of Collection	SUMMA #	Collection			Matrix	# of bottles	Number of preserved Bottles										8260	8270	8280	8290	8300	8310	8320	8330	8340	8350	8360	8370	8380	8390	8400	8410	8420	8430	8440	8450	8460	8470	8480	8490	8500	8510	8520	8530	8540	8550	8560	8570	8580	8590	8600	8610	8620	8630	8640	8650	8660	8670	8680	8690	8700	8710	8720	8730	8740	8750	8760	8770	8780	8790	8800	8810	8820	8830	8840	8850	8860	8870	8880	8890	8900	8910	8920	8930	8940	8950	8960	8970	8980	8990	9000	9010	9020	9030	9040	9050	9060	9070	9080	9090	9100	9110	9120	9130	9140	9150	9160	9170	9180	9190	9200	9210	9220	9230	9240	9250	9260	9270	9280	9290	9300	9310	9320	9330	9340	9350	9360	9370	9380	9390	9400	9410	9420	9430	9440	9450	9460	9470	9480	9490	9500	9510	9520	9530	9540	9550	9560	9570	9580	9590	9600	9610	9620	9630	9640	9650	9660	9670	9680	9690	9700	9710	9720	9730	9740	9750	9760	9770	9780	9790	9800	9810	9820	9830	9840	9850	9860	9870	9880	9890	9900	9910	9920	9930	9940	9950	9960	9970	9980	9990	10000	10010	10020	10030	10040	10050	10060	10070	10080	10090	10100	10110	10120	10130	10140	10150	10160	10170	10180	10190	10200	10210	10220	10230	10240	10250	10260	10270	10280	10290	10300	10310	10320	10330	10340	10350	10360	10370	10380	10390	10400	10410	10420	10430	10440	10450	10460	10470	10480	10490	10500	10510	10520	10530	10540	10550	10560	10570	10580	10590	10600	10610	10620	10630	10640	10650	10660	10670	10680	10690	10700	10710	10720	10730	10740	10750	10760	10770	10780	10790	10800	10810	10820	10830	10840	10850	10860	10870	10880	10890	10900	10910	10920	10930	10940	10950	10960	10970	10980	10990	11000	11010	11020	11030	11040	11050	11060	11070	11080	11090	11100	11110	11120	11130	11140	11150	11160	11170	11180	11190	11200	11210	11220	11230	11240	11250	11260	11270	11280	11290	11300	11310	11320	11330	11340	11350	11360	11370	11380	11390	11400	11410	11420	11430	11440	11450	11460	11470	11480	11490	11500	11510	11520	11530	11540	11550	11560	11570	11580	11590	11600	11610	11620	11630	11640	11650	11660	11670	11680	11690	11700	11710	11720	11730	11740	11750	11760	11770	11780	11790	11800	11810	11820	11830	11840	11850	11860	11870	11880	11890	11900	11910	11920	11930	11940	11950	11960	11970	11980	11990	12000	12010	12020	12030	12040	12050	12060	12070	12080	12090	12100	12110	12120	12130	12140	12150	12160	12170	12180	12190	12200	12210	12220	12230	12240	12250	12260	12270	12280	12290	12300	12310	12320	12330	12340	12350	12360	12370	12380	12390	12400	12410	12420	12430	12440	12450	12460	12470	12480	12490	12500	12510	12520	12530	12540	12550	12560	12570	12580	12590	12600	12610	12620	12630	12640	12650	12660	12670	12680	12690	12700	12710	12720	12730	12740	12750	12760	12770	12780	12790	12800	12810	12820	12830	12840	12850	12860	12870	12880	12890	12900	12910	12920	12930	12940	12950	12960	12970	12980	12990	13000	13010	13020	13030	13040	13050	13060	13070	13080	13090	13100	13110	13120	13130	13140	13150	13160	13170	13180	13190	13200	13210	13220	13230	13240	13250	13260	13270	13280	13290	13300	13310	13320	13330	13340	13350	13360	13370	13380	13390	13400	13410	13420	13430	13440	13450	13460	13470	13480	13490	13500	13510	13520	13530	13540	13550	13560	13570	13580	13590	13600	13610	13620	13630	13640	13650	13660	13670	13680	13690	13700	13710	13720	13730	13740	13750	13760	13770	13780	13790	13800	13810	13820	13830	13840	13850	13860	13870	13880	13890	13900	13910	13920	13930	13940	13950	13960	13970	13980	13990	14000	14010	14020	14030	14040	14050	14060	14070	14080	14090	14100	14110	14120	14130	14140	14150	14160	14170	14180	14190	14200	14210	14220	14230	14240	14250	14260	14270	14280	14290	14300	14310	14320	14330	14340	14350	14360	14370	14380	14390	14400	14410	14420	14430	14440	14450	14460	14470	14480	14490	14500	14510	14520	14530	14540	14550	14560	14570	14580	14590	14600	14610	14620	14630	14640	14650	14660	14670	14680	14690	14700	14710	14720	14730	14740	14750	14760	14770	14780	14790	14800	14810	14820	14830	14840	14850	14860	14870	14880	14890	14900	14910	14920	14930	14940	14950	14960	14970	14980	14990	15000	15010	15020	15030	15040	15050	15060	15070	15080	15090	15100	15110	15120	15130	15140	15150	15160	15170	15180	15190	15200	15210	15220	15230	15240	15250	15260	15270	15280	15290	15300	15310	15320	15330	15340	15350	15360	15370	15380	15390	15400	15410	15420	15430	15440	15450	15460	15470	15480	15490	15500	15510	15520	15530	15540	15550	15560	15570	15580	15590	15600	15610	15620	15630	15640	15650	15660	15670	15680	15690	15700	15710	15720	15730	15740	15750	15760	15770	15780	15790	15800	15810	15820	15830	15840	15850	15860	15870	15880	15890	15900	15910	15920	15930	15940	15950	15960	15970	15980	15990	16000	16010	16020	16030	16040	16050	16060	16070	16080	16090	16100	16110	16120	16130	16140	16150	16160	16170	16180	16190	16200	16210	16220	16230	16240	16250	16260	16270	16280	16290	16300	16310	16320	16330	16340	16350	16360	16370	16380	16390	16400	16410	16420	16430	16440	16450	16460	16470	16480	16490	16500	16510	16520	16530	16540	16

LENOX CHINA  
A DIVISION OF LENOX, INC.  
POMONA, NEW JERSEY

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POMONA DGW AND TCE  
QUARTERLY GROUNDWATER  
MONITORING REPORT  
APRIL 2005 MONITORING ROUND

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PROJECT #43838.001/.002  
JUNE 2005

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## **FIGURES**

<u>No.</u>	<u>Description</u>
1	Groundwater Flow Map – April 19, 2005
2	Groundwater Flow Map – April 19, 2005– Shallow Wells
3	Groundwater Flow Map – April 19, 2005– Deep Wells
4	Extent of Trichloroethene in Groundwater – April 19-21, 2005
5	Residential Well Sampling Location Map

## **APPENDICES**

APPENDIX A – Groundwater Sampling Logs

APPENDIX B – Groundwater Contour Map Report Form

APPENDIX C – Laboratory Data Reports (Bound Separately)



## **1.0 INTRODUCTION**

This report summarizes the results of the groundwater monitoring programs that satisfy the requirements outlined in Lenox's NJPDES Discharge to Groundwater (DGW) permit (permit number NJ0086487) and the Memorandum of Agreement (MOA) between Lenox and NJDEP. All groundwater monitoring and analytical procedures were conducted in accordance with the protocols outlined in the most recently revised Groundwater Sampling and Analysis Plan (GWSAP) and Supplemental Groundwater Sampling and Analysis Plan (SGWSAP) approved by NJDEP.

This report presents the DGW and MOA sampling program data in a single document. The report components are as follows:

- Detection Monitoring Program
- GAC Treatment System Monitoring Program
- Depth to Water and Water Level Elevation Measurements
- TCE Monitoring Program
- SWMU No. 2 and Area of Concern Monitoring Program
- Classification Exception Area/Statistical Analysis Program
- Residential Well Sampling

The first three items satisfy the DGW permit monitoring requirements while the remaining items fulfill the requirements of the MOA.

## **2.0 DETECTION MONITORING PROGRAM (DGW)**

The quarterly detection monitoring program is covered by the GWSAP and consists of the following for the second quarter:

- Sample monitoring wells MW-1, MW-3, MW-4, MW-6, MW-9 and MW-10.
- All samples are analyzed for color and total and dissolved lead and zinc. Samples from MW-1 and MW-10 are also analyzed for total and dissolved iron, total dissolved solids (TDS), total suspended solids (TSS) and volatile organic compounds (VOCs).
- Specific conductivity, pH, temperature and dissolved oxygen are measured in the field during purging and prior to sample collection.

Table 1, Section 2 summarizes the results of the current sampling event. The full laboratory data report is provided in Appendix C. Tables 2 through 7 summarize historical sampling results for each well since 1997.

The April 2005 monitoring results are summarized below:

- Total lead concentrations ranged from less than the laboratory reporting limit of 3.0 micrograms per liter ( $\mu\text{g/l}$ ) to 27.0  $\mu\text{g/l}$ , with the highest concentration in the sample from MW-3. Dissolved lead concentrations ranged from less than the laboratory reporting limit of 3.0  $\mu\text{g/l}$  to 21.5  $\mu\text{g/l}$ , with the highest concentration in the sample from MW-3.
- Total zinc concentrations ranged from less than the laboratory reporting limit of 20  $\mu\text{g/l}$  to 3,060  $\mu\text{g/l}$ , with the highest concentration in the sample from MW-3. Dissolved zinc concentrations ranged from less than the laboratory reporting limit of 20  $\mu\text{g/l}$  to 3,090  $\mu\text{g/l}$ , with the highest concentration also in the sample from MW-3.
- Samples from wells MW-1 and MW-10 were analyzed for iron. Total iron was detected at a concentration of 637  $\mu\text{g/l}$  in MW-1 and at a concentration of 122  $\mu\text{g/l}$  in MW-10.

Dissolved iron was not detected in either sample at concentrations exceeding the 100 µg/l laboratory reporting limit.

- TDS concentrations were 67 milligrams per liter (mg/l) in the sample from MW-1 and 234 mg/l in the sample from MW-10. TSS concentrations were less than the laboratory reporting limit of 4.0 mg/l in the samples from both MW-1 and MW-10.
- Color concentrations ranged from less than the laboratory reporting limit of 5 color units to 35 color units. The highest concentration was detected in the sample from MW-1.
- There was good agreement between analyte concentrations in the field (MW-10) and duplicate (MW-2) samples.
- No analytes were detected in the field or trip blank samples at concentrations exceeding their respective laboratory reporting limits.

**LENOX CHINA  
POMONA, NEW JERSEY**

**TABLE 1 SECTION 2**

**GROUNDWATER QUALITY DATA - APRIL 21, 2005**

Parameter	Units	MW-1	MW-3	MW-4	MW-6	MW-9	MW-10	MW-2 (MW-10 Dup)	FB	TB
pH, Field	pH units	5.51	6.04	6.04	3.79	6.00	5.31	5.31	-	-
Specific Conductance	ms	87	311	175	151	290	306	306	-	-
Oxygen, Dissolved	mg/l	5.80	3.20	5.20	3.90	0.20	0.50	0.50	-	-
Temperature, Field	°C	9.8	13.7	12.6	14.2	15.6	15.6	15.6	-	-
Total Suspended Solids	mg/l	<4.0	-	-	-	-	<4.0	<4.0	<4.0	-
Total Dissolved Solids	mg/l	67	-	-	-	-	234	225	<10	-
Ammonia-Nitrogen	mg/l	-	-	-	-	-	-	-	-	-
Color	CU units	35	<5	<5	<5	<5	<5	<5	<5	-
Sulfate	mg/l	-	-	-	-	-	-	-	-	-
Iron, Dissolved	µg/l	<100	-	-	-	-	<100	<100	<100	-
Lead, Dissolved	µg/l	<3.0	<b>21.5</b>	9.6	<3.0	<3.0	<3.0	<3.0	<3.0	-
Sodium, Dissolved	µg/l	-	-	-	-	-	-	-	-	-
Zinc, Dissolved	µg/l	<20	<b>3,090</b>	29.7	<20	<20	<20	<20	<20	-
Iron, Total	µg/l	637	-	-	-	-	122	128	<100	-
Lead, Total	µg/l	<3.0	<b>27.0</b>	<b>11.5</b>	<3.0	<3.0	<3.0	<3.0	<3.0	-
Sodium, Total	µg/l	-	-	-	-	-	-	-	-	-
Zinc, Total	µg/l	<20	<b>3,060</b>	34.0	<20	<20	<20	<20	<20	-
<b>Volatile Organic Compounds</b>										
1,1-Dichloroethene	µg/l	<0.35	-	-	-	-	<0.35	<0.35	<0.35	<0.35
Cis-1,2-Dichloroethene	µg/l	<0.15	-	-	-	-	0.99 J	1.0	<0.15	<0.15
Trans-1,2-Dichloroethene	µg/l	<0.28	-	-	-	-	<0.28	<0.28	<0.28	<0.28
Methylene Chloride	µg/l	<0.13	-	-	-	-	<0.13	<0.13	<0.13	<0.13
Trichloroethene (TCE)	µg/l	<0.20	-	-	-	-	<b>5.1</b>	<b>5.2</b>	<0.20	<0.20
Vinyl Chloride	µg/l	<0.27	-	-	-	-	<0.27	<0.27	<0.27	<0.27
Sum of Volatile Organic Compounds	µg/l	<0.69	-	-	-	-	6.61	6.72	<0.69	<0.69

**Notes:**

- = Not Analyzed   < = Not Detected   J = Estimated Value

Values in bold font exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l), Zinc (36.7 µg/l) or TCE (1.0 µg/l).

LENOX CHINA - POMONA, NEW JERSEY

TABLE 2 SECTION 2

SUMMARY OF WATER QUALITY DATA FOR WELL MW-1

Sampling Date	Ammonia (mg/l)	Iron, Dissolved (ug/l)	Lead, Total (ug/l)	Lead, Dissolved (ug/l)	Oxygen, Dissolved (mg/l)	pH (pH units)	Sodium, Dissolved (ug/l)	Specific Conductance @ 25 C (umhos/cm)	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Total Suspended Solids (mg/l)	Sum of Volatile Organic Compounds (ug/l)	Zinc, Total (ug/l)	Zinc, Dissolved (ug/l)
4/13/1998	-	134	< 3.0	< 3.0	2.70	4.92	-	60.1	-	90	9	< 0.20	< 20	< 20
7/6/1998	-	322	<b>10.8</b>	< 3.0	5.40	5.76	-	32.1	-	126	11	< 0.20	29.4	33.4
10/5/1998	-	438	3.0	< 3.0	0.00	5.10	-	40.3	-	71	88	< 0.20	< 20	< 20
2/16/1999	< 0.10	< 100	< 3.0	< 3.0	7.66	6.00	24,200	25.0	18.5	124	7	< 0.20	< 20	23.6
4/12/1999	-	< 100	3.3	< 3.0	5.20	7.91	-	115	-	65	6	< 0.20	< 20	< 20
7/12/1999	-	< 100	< 3.0	< 3.0	7.30	6.18	-	32.6	-	80	< 4	< 0.20	22.5	< 20
10/18/1999	-	< 100	3.6	< 3.0	8.90	5.20	-	121	-	77	< 4	< 0.20	30.2	< 20
1/18/2000	< 0.10	< 100	< 3.0	< 3.0	6.62	5.66	15,500	80.8	< 20	36	< 4	< 0.20	< 20	< 20
4/10/2000	-	< 100	< 3.0	< 3.0	6.20	5.87	-	23.6	-	131	16	< 0.20	25.4	< 20
7/12/2000	-	< 100	< 3.0	< 3.0	7.10	6.53	-	155	-	117	< 4	< 0.66	< 20	< 20
10/17/2000	-	< 100	< 3.0	< 3.0	4.62	4.83	-	156	-	37	6	< 0.66	< 20	< 20
1/24/2001	< 0.10	< 100	< 3.0	< 3.0	4.68	4.69	17,900	160	< 20	101	< 4	< 0.89	< 20	< 20
4/18/2001	-	< 100	3.7	< 3.0	7.79	5.55	-	60.0	-	89	7	0.56	21.3	< 20
7/23/2001	-	< 100	< 3.0	< 3.0	6.56	5.12	-	115	-	36	< 4	< 1.3	< 20	< 20
10/16/2001	-	< 100	< 3.0	4.1	9.42	5.30	-	195	-	96	5	< 1.3	24.2	< 20
1/23/2002	< 0.10	< 100	< 3.0	< 3.0	9.25	5.23	31,700	224	< 20	148	< 4	< 1.3	< 20	< 20
4/9/2002	-	< 100	< 3.0	< 3.0	-	4.98	-	289	-	124	< 4	< 1.3	< 20	21.0
7/19/2002	-	< 100	< 3.0	< 3.0	8.23	5.23	-	171	-	64	< 4	< 0.44	< 20	< 20
10/15/2002	-	114	3.3	3.8	8.64	4.82	-	189	-	83	< 4	< 0.60	< 20	< 20
1/30/2003	< 0.10	< 100	< 3.0	< 3.0	9.40	5.11	11,100	94	< 20	56	4	< 0.60	< 20	< 20
4/16/2003	-	< 100	3.6	< 3.0	10.70	5.45	-	83	-	59	10	< 1.33	< 20	< 20
7/23/2003	-	< 100	5.7	< 3.0	5.70	4.81	-	75	-	100	9	< 1.33	< 20	< 20
10/30/2003	-	< 100	< 3.0	< 3.0	7.40	4.80	-	87	-	71	< 4	< 1.33	< 20	< 20
1/22/2004	< 0.10	< 100	< 3.0	< 3.0	9.80	4.90	9,910	96	< 20	79	9	< 1.33	< 20	< 20
4/29/2004	-	< 100	< 3.0	< 3.0	-	5.15	-	90	-	66	< 4	< 1.33	< 20	< 20
7/26/2004	-	< 100	< 3.0	3.0	*	*	-	*	-	76	< 4	< 0.69	< 20	< 20
10/20/2004	-	< 100	< 3.0	< 3.0	5.80	4.70	-	116	-	95	< 4	< 0.69	< 20	< 20
1/21/2005	< 0.10	< 100	< 3.0	< 3.0	6.60	5.11	10,200	183	10.50	43	16	< 0.69	< 20	< 20
4/21/2005	-	< 100 ✓	< 3.0 ✓	< 3.0 ✓	5.80 ✓	5.51 ✓	-	87 ✓	-	67 ✓	< 4 ✓	< 0.69 ✓	< 20 ✓	< 20 ✓

- Denotes Not Analyzed < Denotes Not Detected

\* Denotes data not collected due to water quality meter malfunction.

Values in bold font exceed the site specific Groundwater Quality Criteria for Lead (10 ug/l) or Zinc (36.7 ug/l).

LENOX CHINA - POMONA, NEW JERSEY

TABLE 3 SECTION 2

SUMMARY OF WATER QUALITY DATA FOR WELL MW-3

Sampling Date	Lead, Total (ug/l)	Lead, Dissolved (ug/l)	Oxygen, Dissolved (mg/l)	pH (pH units)	Sodium, Dissolved (ug/l)	Specific Conductance @ 25 C (umhos/cm)	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Total Suspended Solids (mg/l)	Zinc, Total (ug/l)	Zinc, Dissolved (ug/l)
4/13/1998	<b>33.1</b>	<b>30.2</b>	4.60	6.21	-	537	-	-	-	<b>3,870</b>	<b>3,870</b>
7/6/1998	<b>34.1</b>	<b>26.9</b>	3.10	6.06	-	590	-	-	-	<b>3,530</b>	<b>3,500</b>
10/5/1998	<b>78.8</b>	<b>12.8</b>	5.40	6.50	-	527	-	-	-	<b>3,500</b>	<b>3,340</b>
1/11/1999	<b>78.6</b>	<b>20.0</b>	3.40	5.90	20,600	125	35.8	219	-	<b>5,130</b>	<b>5,170</b>
4/12/1999	<b>47.0</b>	<b>25.2</b>	9.00	8.16	-	24.5	-	-	-	<b>2,340</b>	<b>2,200</b>
7/12/1999	<b>55.9</b>	<b>22.7</b>	19.00	7.55	-	5.2	-	-	-	<b>4,260</b>	<b>4,370</b>
10/18/1999	<b>39.1</b>	<b>21.1</b>	8.20	6.44	-	266	-	-	-	<b>4,000</b>	<b>4,030</b>
1/18/2000	<b>72.7</b>	<b>16.6</b>	1.64	6.95	21,100	189	45.2	154	< 4	<b>4,240</b>	<b>4,440</b>
4/10/2000	<b>18.6</b>	<b>14.3</b>	4.40	6.51	-	188	-	-	-	<b>2,820</b>	<b>2,700</b>
7/11/2000	<b>13.2</b>	<b>12.7</b>	4.80	7.18	-	284	-	-	-	<b>4,130</b>	<b>4,100</b>
10/17/2000	<b>24.1</b>	<b>12.3</b>	1.25	5.63	-	337	-	-	-	<b>3,780</b>	<b>3,960</b>
1/24/2001	<b>64.2</b>	<b>10.6</b>	2.82	5.68	15,500	238	26.7	151	21	<b>2,720</b>	<b>2,720</b>
4/18/2001	<b>24.8</b>	<b>18.0</b>	2.86	5.89	-	106	-	-	-	<b>2,330</b>	<b>2,380</b>
7/23/2001	<b>11.6</b>	<b>9.1</b>	1.92	5.78	-	309	-	-	-	<b>3,480</b>	<b>3,230</b>
10/16/2001	<b>15.1</b>	<b>12.8</b>	9.34	6.83	-	255	-	-	-	<b>2,290</b>	<b>2,230</b>
1/23/2002	<b>13.6</b>	<b>11.8</b>	8.81	6.73	26,000	324	70.8	228	< 4	<b>3,900</b>	<b>3,810</b>
4/10/2002	<b>12.2</b>	<b>11.2</b>	-	6.66	-	567	-	-	-	<b>4,290</b>	<b>4,340</b>
7/18/2002	<b>80.8</b>	<b>69.5</b>	1.48	5.36	-	738	-	-	-	<b>14,700</b>	<b>14,900</b>
10/17/2002	<b>20.2</b>	<b>21.4</b>	6.80	5.21	-	466	-	-	-	<b>8,580</b>	<b>8,560</b>
1/31/2003	<b>9.5</b>	<b>8.4</b>	4.60	5.11	11,400	111	28.9	90	< 4	<b>1,540</b>	<b>1,570</b>
4/16/2003	<b>117</b>	<b>116</b>	5.30	5.32	-	1,050	-	-	-	<b>4,050</b>	<b>4,170</b>
7/23/2003	<b>69.0</b>	<b>44.6</b>	-	5.31	-	392	-	-	-	<b>3,810</b>	<b>3,840</b>
10/29/2003	<b>51.6</b>	<b>43.9</b>	5.20	5.69	-	358	-	-	-	<b>5,030</b>	<b>5,810</b>
1/22/2004	<b>24.9</b>	<b>13.2</b>	6.70	5.42	21,200	263	33.6	158	15	<b>3,420</b>	<b>3,430</b>
4/28/2004	<b>53.9</b>	<b>47.5</b>	-	5.58	-	440	-	-	-	<b>4,350</b>	<b>4,170</b>
7/26/2004	<b>32.8</b>	<b>29.5</b>	*	*	-	*	-	-	-	<b>4,490</b>	<b>4,440</b>
10/20/2004	<b>58.1</b>	<b>51.1</b>	4.50	5.68	-	509	-	-	-	<b>3,580</b>	<b>3,520</b>
1/21/2005	<b>19.1</b>	<b>9.4</b>	4.10	6.01	20,100	590	40.3	258	18	<b>2,980</b>	<b>2,980</b>
4/21/2005	<b>27.0</b> ✓	<b>21.5</b> ✓	3.20~	6.04~	-	311~	-	-	-	<b>3,060</b> ✓	<b>3,090</b> ✓

- Denotes Not Analyzed      < Denotes Not Detected

\* Denotes data not collected due to water quality meter malfunction.

Values in **bold** font exceed the site specific Groundwater Quality Criteria for Lead (10 ug/l) or Zinc (36.7 ug/l).

LENOX CHINA - POMONA, NEW JERSEY

TABLE 4 SECTION 2

SUMMARY OF WATER QUALITY DATA FOR WELL MW-4

Sampling Date	Lead, Total (ug/l)	Lead Dissolved (ug/l)	Oxygen, Dissolved (mg/l)	pH (pH units)	Sodium, Dissolved (ug/l)	Specific Conductance @ 25 C (umhos/cm)	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Total Suspended Solids (mg/l)	Zinc, Total (ug/l)	Zinc, Dissolved (ug/l)
4/13/1998	< 3.0	< 3.0	2.30	5.72	-	455	-	-	-	< 20	< 20
7/6/1998	3.7	3.3	2.50	6.34	-	512	-	-	-	22.9	26.6
10/5/1998	4.4	< 3.0	5.10	6.16	-	462	-	-	-	24.8	30.7
1/11/1999	3.0	3.6	4.27	7.20	30,100	225	285	499	-	23.9	38.9
4/12/1999	< 3.0	3.4	3.40	8.12	-	8.08	-	-	-	58.3	51.7
7/12/1999	< 3.0	< 3.0	16.50	7.24	-	3.81	-	-	-	54.2	38.9
10/18/1999	3.8	< 3.0	7.00	5.94	-	413	-	-	-	101	82.2
1/18/2000	< 3.0	3.6	7.96	6.48	21,000	339	210	302	< 4	158	155
4/10/2000	< 3.0	< 3.0	6.70	6.92	-	397	-	-	-	32.5	128
7/11/2000	3.0	4.6	7.20	7.00	-	346	-	-	-	100	116
10/17/2000	< 3.0	3.5	5.19	5.64	-	344	-	-	-	86.5	83.5
1/24/2001	10.6	8.5	8.35	5.82	17,800	384	127	257	< 4	70.8	72.1
4/18/2001	9.2	7.3	6.40	6.04	-	199	-	-	-	94.6	92.6
7/23/2001	8.3	8.0	7.10	5.79	-	240	-	-	-	54.0	66.6
10/16/2001	6.4	7.5	7.55	5.81	-	206	-	-	-	87.5	80.2
1/23/2002	6.3	6.8	8.52	5.44	14,000	204	70.5	150	< 4	62.1	63.5
4/9/2002	9.2	8.9	-	5.68	-	468	-	-	-	116	117
7/18/2002	7.2	8.9	7.57	6.76	-	255	-	-	-	102	109
10/15/2002	8.7	10.0	7.10	5.19	-	277	-	-	-	94.1	92.1
1/31/2003	11.4	6.9	7.90	5.76	12,100	169	67.6	141	12	81.9	74.4
4/16/2003	12.1	8.5	7.20	5.98	-	206	-	-	-	81.4	74.6
7/23/2003	6.9	4.1	-	5.73	-	225	-	-	-	87.5	84.4
10/30/2003	26.7	24.9	4.80	5.40	-	348	-	-	-	133	127
1/22/2004	5.9	3.8	9.10	5.73	14,800	221	69.0	161	6	63.0	66.2
4/29/2004	13.7	11.3	-	5.79	-	250	-	-	-	68.3	60.5
7/26/2004	15.5	11.6	-	5.44	-	313	-	-	-	58.1	57.7
10/20/2004	34.2	32.2	5.10	5.21	-	325	-	-	-	63.4	61.0
1/21/2005	5.6	5.1	6.60	6.02	13,700	325	66.2	155	< 4	37.1	37.8
4/21/2005	11.5✓	9.6✓	5.20✓	6.04✓	-	175✓	-	-	-	34.0✓	29.7✓

- Denotes Not Analyzed < Denotes Not Detected

Values in **bold** font exceed the site specific Groundwater Quality Criteria for Lead (10 ug/l) or Zinc (36.7 ug/l).

LENOX CHINA - POMONA, NEW JERSEY

TABLE 5 SECTION 2

SUMMARY OF WATER QUALITY DATA FOR WELL MW-6

Sampling Date	Lead, Total (ug/l)	Lead, Dissolved (ug/l)	Oxygen, Dissolved (mg/l)	pH (pH units)	Sodium, Dissolved (ug/l)	Specific Conductance @ 25 C (umhos/cm)	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Total Suspended Solids (mg/l)	Zinc, Total (ug/l)	Zinc, Dissolved (ug/l)
4/13/1998	< 3.0	< 3.0	2.50	5.94	-	501	-	-	-	< 20	< 20
7/6/1998	< 3.0	< 3.0	2.80	4.94	-	465	-	-	-	25.5	< 20
10/5/1998	< 3.0	< 3.0	2.20	4.96	-	459	-	-	-	30.9	22.3
1/11/1999	< 3.0	< 3.0	2.99	5.20	25,500	75	92.2	172	-	<0.02	22.2
4/12/1999	6.5	3.2	10.20	7.09	-	25	-	-	-	20.0	23.5
7/12/1999	< 3.0	< 3.0	3.80	6.57	-	179	-	-	-	< 20	22.0
10/18/1999	< 3.0	< 3.0	4.30	4.56	-	193	-	-	-	21.1	< 20
1/18/2000	< 3.0	< 3.0	4.22	5.10	11,400	103	59.0	82	< 4	< 20	< 20
4/10/2000	< 3.0	< 3.0	4.10	5.09	-	27.1	-	-	-	20.8	<b>42.0</b>
7/12/2000	< 3.0	< 3.0	6.40	6.02	-	230	-	-	-	< 20	< 20
10/17/2000	< 3.0	< 3.0	4.72	4.21	-	224	-	-	-	< 20	< 20
1/24/2001	< 3.0	< 3.0	4.03	4.22	60,200	134	47.1	114	< 4	< 20	< 20
4/18/2001	< 3.0	< 3.0	4.43	4.43	-	92	-	-	-	< 20	20.7
7/23/2001	< 3.0	< 3.0	4.25	4.31	-	152	-	-	-	< 20	< 20
10/16/2001	3.0	< 3.0	8.46	4.46	-	200	-	-	-	< 20	< 20
1/23/2002	< 3.0	< 3.0	9.11	4.56	11,000	169	63.7	120	< 4	< 20	22.0
4/9/2002	< 3.0	< 3.0	-	4.06	-	212	-	-	-	< 20	< 20
7/18/2002	< 3.0	< 3.0	7.94	4.58	-	181	-	-	-	< 20	< 20
10/15/2002	< 3.0	< 3.0	4.76	4.14	-	249	-	-	-	< 20	< 20
1/30/2003	5.0	< 3.0	7.00	4.26	75,700	107	52.0	61	< 4	< 20	< 20
4/16/2003	< 3.0	< 3.0	8.30	4.21	-	167	-	-	-	< 20	< 20
7/24/2003	< 3.0	< 3.0	-	4.31	-	180	-	-	-	< 20	< 20
10/29/2003	< 3.0	< 3.0	4.70	4.15	-	186	-	-	-	< 20	< 20
1/22/2004	< 3.0	< 3.0	8.20	3.87	10,300	141	45.5	97	< 4	< 20	< 20
4/29/2004	< 3.0	< 3.0	-	4.19	-	152	-	-	-	< 20	< 20
7/26/2004	< 3.0	< 3.0	-	4.17	-	177	-	-	-	< 20	< 20
10/20/2004	< 3.0	< 3.0	5.00	4.10	-	223	-	-	-	< 20	< 20
1/21/2005	< 3.0	< 3.0	5.80	4.31	8,980	220	40.9	72	< 4	< 20	< 20
4/21/2005	< 3.0 ✓	< 3.0 ✓	3.90 ✓	3.79 ✓	-	151 ✓	-	-	-	< 20 ✓	< 20 ✓

- Denotes Not Analyzed      < Denotes Not Detected

Values in **bold font** exceed the site specific Groundwater Quality Criteria for Zinc (36.7 ug/l).



LENOX CHINA - POMONA, NEW JERSEY

TABLE 6 SECTION 2

SUMMARY OF WATER QUALITY DATA FOR WELL MW-9

Sampling Date	Ammonia (mg/l)	Lead, Total (ug/l)	Lead, Dissolved (ug/l)	Oxygen, Dissolved (mg/l)	pH (pH units)	Sodium, Dissolved (ug/l)	Specific Conductance @ 25 C (umhos/cm)	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Total Suspended Solids (mg/l)	Zinc, Total (ug/l)	Zinc, Dissolved (ug/l)
4/13/1998	-	< 3.0	< 3.0	1.80	6.69	-	605	-	-	-	< 20	< 20
7/6/1998	-	3.4	< 3.0	0.80	6.62	-	960	-	-	-	< 20	<b>40.6</b>
10/5/1998	-	< 3.0	< 3.0	0.80	6.84	-	987	-	-	-	< 20	< 20
2/16/1999	0.93	< 3.0	< 3.0	0.53	5.90	54,200	200	93.0	292	-	< 20	< 20
4/12/1999	-	< 3.0	< 3.0	0.10	8.24	-	26.3	-	-	-	< 20	< 20
7/12/1999	-	< 3.0	< 3.0	2.40	7.59	-	5.68	-	-	-	< 20	< 20
10/18/1999	-	< 3.0	< 3.0	0.70	6.62	-	544	-	-	-	< 20	< 20
1/18/2000	0.67	< 3.0	< 3.0	1.06	7.35	93,000	420	141	307	< 4	< 20	< 20
4/10/2000	-	< 3.0	< 3.0	1.60	7.32	-	425	-	-	-	25.7	26.2
7/11/2000	-	< 3.0	< 3.0	2.20	7.77	-	408	-	-	-	< 20	< 20
10/17/2000	-	< 3.0	< 3.0	1.16	6.33	-	433	-	-	-	< 20	< 20
1/24/2001	0.22	< 3.0	< 3.0	0.71	5.71	40,100	325	58.7	220	< 4	< 20	< 20
4/18/2001	-	< 3.0	< 3.0	0.00	6.69	-	217	-	-	-	< 20	< 20
7/23/2001	-	< 3.0	< 3.0	0.65	6.56	-	464	-	-	-	< 20	< 20
10/16/2001	-	< 3.0	< 3.0	0.96	6.99	-	359	-	-	-	< 20	< 20
1/23/2002	0.22	< 3.0	< 3.0	2.38	5.94	42,000	265	51.6	189	4.0	< 20	< 20
4/9/2002	-	< 3.0	< 3.0	-	5.12	-	235	-	-	-	< 20	< 20
7/18/2002	-	< 3.0	< 3.0	0.36	6.12	-	393	-	-	-	< 20	< 20
10/17/2002	-	< 3.0	< 3.0	1.84	5.64	-	397	-	-	-	< 20	< 20
1/31/2003	0.17	< 3.0	< 3.0	1.50	6.09	51,400	300	80.8	242	< 4	< 20	< 20
4/16/2003	-	< 3.0	< 3.0	3.10	6.00	-	235	-	-	-	< 20	< 20
7/23/2003	-	< 3.0	< 3.0	-	5.79	-	276	-	-	-	< 20	< 20
10/29/2003	-	< 3.0	< 3.0	2.70	5.80	-	245	-	-	-	< 20	< 20
1/22/2004	0.18	< 3.0	< 3.0	2.90	5.53	44,300	286	55.4	199	< 4	< 20	< 20
4/29/2004	-	< 3.0	< 3.0	-	5.83	-	252	-	-	-	< 20	< 20
7/26/2004	-	< 3.0	< 3.0	-	5.87	-	261	-	-	-	< 20	< 20
10/20/2004	-	< 3.0	< 3.0	2.10	5.58	-	319	-	-	-	< 20	< 20
1/21/2005	0.15	< 3.0	< 3.0	1.40	5.90	48,300	527	68.8	202	5.0	< 20	< 20
4/21/2005	-	< 3.0 ✓	< 3.0 ✓	0.20 ✓	6.00 ✓	-	290 ✓	-	-	-	< 20 ✓	< 20 ✓

- Denotes Not Analyzed    < Denotes Not Detected

Values in **bold** font exceed the site specific Groundwater Quality Criteria for Zinc (36.7 ug/l).

LENOX CHINA - POMONA, NEW JERSEY

TABLE 7 SECTION 2

SUMMARY OF WATER QUALITY DATA FOR WELL MW-10

Sampling Date	Iron, Dissolved (ug/l)	Lead, Total (ug/l)	Lead, Dissolved (ug/l)	Oxygen, Dissolved (mg/l)	pH (pH units)	Sodium, Dissolved (ug/l)	Specific Conductance @ 25 C (umhos/cm)	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Total Suspended Solids (mg/l)	Sum of Volatile Organic Compounds (ug/l)	Zinc, Total (ug/l)	Zinc, Dissolved (ug/l)
4/14/1998	< 100	3.2	< 3.0	2.10	6.10	-	722	-	200	< 4	34.0	< 20	< 20
7/6/1998	652	< 3.0	< 3.0	2.90	5.90	-	658	-	276	< 4	22.9	31.5	<b>44.2</b>
10/5/1998	538	< 3.0	< 3.0	2.90	5.85	-	715	-	222	14	13.3	< 20	< 20
1/11/1999	< 100	< 3.0	< 3.0	3.14	5.70	37,000	175	56.8	247	< 4	28.3	23.2	< 20
4/12/1999	< 100	< 3.0	9.1	5.90	7.38	-	27.2	-	139	7	9.3	< 20	< 20
7/12/1999	< 100	< 3.0	< 3.0	14.40	7.48	-	7.5	-	175	< 4	13.3	< 20	22.8
10/18/1999	< 100	< 3.0	< 3.0	1.90	5.60	-	283	-	187	< 4	14.0	< 20	< 20
1/18/2000	< 100	< 3.0	< 3.0	3.51	6.25	30,700	198	66.3	171	< 4	11.1	< 20	< 20
4/10/2000	< 100	3.2	< 3.0	3.80	6.37	-	200	-	141	12	8.3	< 20	< 20
7/12/2000	< 100	< 3.0	< 3.0	5.00	7.13	-	253	-	144	< 4	8.72	< 20	< 20
10/17/2000	< 100	< 3.0	< 3.0	0.97	5.28	-	336	-	183	< 4	6.5	< 20	< 20
1/24/2001	< 100	< 3.0	< 3.0	1.42	5.33	34,800	356	86.1	229	< 4	14.4	< 20	< 20
4/18/2001	< 100	< 3.0	< 3.0	0.33	5.79	-	201	-	196	< 4	13.07	< 20	< 20
7/23/2001	< 100	< 3.0	< 3.0	0.77	5.59	-	371	-	210	< 4	13.8	< 20	< 20
10/16/2001	< 100	< 3.0	< 3.0	7.26	6.14	-	352	-	231	< 4	11.9	< 20	< 20
1/23/2002	< 100	< 3.0	< 3.0	7.43	6.32	38,400	320	79.2	256	< 4	2.6	< 20	< 20
4/9/2002	< 100	< 3.0	< 3.0	-	5.36	-	529	-	257	< 4	8.6	< 20	< 20
7/18/2002	< 100	< 3.0	< 3.0	6.49	6.13	-	341	-	217	< 4	7.2	< 20	< 20
10/15/2002	< 100	3.9	< 3.0	2.65	5.22	-	311	-	165	< 4	7.5	< 20	< 20
1/30/2003	< 100	< 3.0	< 3.0	6.00	5.37	20,900	132	42.7	122	15	4.4	< 20	< 20
4/16/2003	< 100	8.1	< 3.0	3.20	5.56	-	94	-	155	50	< 1.33	< 20	< 20
7/24/2003	< 100	< 3.0	< 3.0	-	5.39	-	132	-	95	11	< 1.33	< 20	< 20
10/29/2003	< 100	4.3	< 3.0	2.10	5.44	-	229	-	173	< 4	7.04	< 20	< 20
1/22/2004	< 100	6.0	< 3.0	8.10	5.24	18,700	122	28.7	182	96	4.24	< 20	< 20
4/29/2004	< 100	< 3.0	< 3.0	-	5.37	-	153	-	115	5	5.3	< 20	< 20
7/26/2004	< 100	3.3	< 3.0	-	5.32	-	262	-	189	9	8.4	< 20	< 20
10/20/2004	< 100	< 3.0	< 3.0	1.60	5.23	-	347	-	200	< 4	8.51	< 20	< 20
1/21/2005	< 100	3.2	< 3.0	4.10	5.48	29,500	390	38.8	143	7	6.45	< 20	< 20
4/21/2005	< 100	< 3.0✓	< 3.0✓	0.50	5.31	-	306	-	234✓	< 4✓	6.61✓	< 20✓	< 20✓

- Denotes Not Analyzed    < Denotes Not Detected

Values in **bold font** exceed the site specific Groundwater Quality Criteria for Lead (10 ug/l) or Zinc (36.7 ug/l).

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-1

Well Use: Monitoring

Sample ID: MW-1

Sample Date: 4/21/05

Sample Time: 1230 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 8.68 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 29.75 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 21.07 ✓ feet

Volume of Standing Water: 13.70 gallons

Volume to be removed: 41.10 gallons

Actual Volume removed: 42.00 ✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.0 ✓ gpm

Purge Time: 14 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
1219	10	5.62	0.090	6.0	10.2
1222	20	5.61	0.087	5.9	9.8
1225	30	5.53	0.088	5.7	9.8
1228 ✓	40	5.51	0.087	5.8	9.8

Depth to water after purge: 9.65 ft. below m.p.

Time: 1230 ✓

Depth to water prior to sampling: 9.65 ft. below m.p.

Time: 1230

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals (Pb, Zn, Fe), Color, TDS/TSS,

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/21/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-3

Well Use: Monitoring

Sample ID: MW-3

Sample Date: 4/21/05

Sample Time: 1134✓

## II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 7.38 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 30.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 23.02✓ feet

Volume of Standing Water: 14.86 gallons

Volume to be removed: 44.88 gallons

Actual Volume removed: 45.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.5✓ gpm

Purge Time: 13✓ min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
1123	10	5.99	0.285	2.8	14.5
1126	20	6.00	0.289	2.9	13.9
1129	30	6.03	0.297	3.1	13.8
1132 /	40	6.04	0.311	3.2	13.7

Depth to water after purge: 9.26✓ ft. below m.p.

Time: 1134

Depth to water prior to sampling: 9.26 ft. below m.p.

Time: 1134✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals (Pb, Zn), Color

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/21/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-4

Well Use: Monitoring

Sample ID: MW-4

Sample Date: 4/21/05

Sample Time: 1205

## II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 5.28 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 26.80 ft. below m.p.

Measuring Point (m.p.): PVC Casing

$\Delta$  h: 21.52 feet

Volume of Standing Water: 13.99 gallons

Volume to be removed: 41.97 gallons

Actual Volume removed: 42.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.8 gpm

Purge Time: 11 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
1156	10	6.16	0.177	7.2	13.6
1158	20	6.20	0.183	6.1	12.8
1201	30	6.16	0.180	5.4	12.6
1204 ✓	40	6.04	0.175	5.2	12.6

Depth to water after purge: 5.34 ft. below m.p.

Time: 1205

Depth to water prior to sampling: 5.34 ft. below m.p.

Time: 1205

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals (Pb, Zn), Color

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/21/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-6

Well Use: Monitoring

Sample ID: MW-6

Sample Date: 4/21/05

Sample Time: 1020

## II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 6.17 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 30.75 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 24.58 feet

Volume of Standing Water: 15.98 gallons

Volume to be removed: 47.94 gallons

Actual Volume removed: 50.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.6 gpm

Purge Time: 14 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
1009	10	3.31	0.093	4.0	13.9
1011	20	3.52	0.113	3.8	14.1
1014	30	3.61	0.127	3.9	14.1
1016	40	3.68	0.140	4.0	14.2
1019	50	3.79	0.151	3.9	14.2

Depth to water after purge: 6.85 ft. below m.p.

Time: 1020

Depth to water prior to sampling: 6.85 ft. below m.p.

Time: 1020

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals (Pb, Zn), Color

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/21/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-9

Well Use: Monitoring

Sample ID: MW-9

Sample Date: 4/21/05

Sample Time: 1112

## II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 10.30 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 31.15 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 20.85 feet

Volume of Standing Water: 13.55 gallons

Volume to be removed: 40.65 gallons

Actual Volume removed: 41.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.7 gpm

Purge Time: 11 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
1103	10	6.52	0.388	0.0	14.9
1106	20	6.17	0.327	0.0	15.4
1108	30	6.04	0.301	0.1	15.5
1111 ✓	40	6.00	0.290	0.2	15.6

Depth to water after purge: 10.44 ft. below m.p.

Time: 1112

Depth to water prior to sampling: 10.44 ft. below m.p.

Time: 1112

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals (Pb, Zn), Color

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/21/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-10

Well Use: Monitoring

Sample ID: MW-10/MW-2

Sample Date: 4/21/05

Sample Time: 1040

## II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 4.88 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 29.30 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 24.42 feet

Volume of Standing Water: 15.87 gallons

Volume to be removed: 47.61 gallons

Actual Volume removed: 50.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.2 gpm

Purge Time: 12 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
1030	10	5.12	0.299	1.1	15.2
1032	20	5.20	0.310	0.6	15.5
1034	30	5.22	0.308	0.4	15.6
1037	40	5.29	0.308	0.3	15.6
1039 /	50	5.31	0.306	0.5	15.6

Depth to water after purge: 5.23 ft. below m.p.

Time: 1040

Depth to water prior to sampling: 5.23 ft. below m.p.

Time: 1040

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals (Pb, Zn, Fe), Color, TDS/TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/21/05



### 3.0 GAC TREATMENT SYSTEM MONITORING PROGRAM (DGW)

Groundwater samples from the GAC unit influent, mid-point, and effluent sampling ports were analyzed for TCE and its breakdown products (1,1-DCE, cis/trans 1,2-DCE, and vinyl chloride), total and dissolved iron, lead, and zinc, TDS, and TSS. The analytical results are summarized in Table 1, Section 3.

The April 2005 GAC monitoring results are summarized below:

- The GAC influent sample contained TCE at a concentration of 4.7 µg/l. The midpoint and effluent samples did not contain TCE at concentrations exceeding the 0.50 µg/l laboratory reporting limit.
- 1,1-Dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride were not detected in the influent, mid-point or effluent samples at concentrations greater than their respective laboratory reporting limits.
- Lead concentrations in the unfiltered influent, mid-point and effluent samples were <1.3 µg/l, <1.3 µg/l and 4.3 µg/l, respectively. Lead concentrations in the filtered influent, mid-point and effluent samples were all less than the laboratory reporting limit of 1.3 µg/l.
- Zinc concentrations in the unfiltered influent, mid-point and effluent samples were 66.4 µg/l, 24.3 µg/l and 519 µg/l, respectively. Zinc concentrations in the filtered samples were 63.5 µg/l, 27.1 µg/l and 319 µg/l, respectively.
- Iron concentrations in the unfiltered influent, mid-point and effluent samples were 175 µg/l, <39.2 µg/l and 2,670 µg/l, respectively. Iron concentrations in the filtered samples were 118 µg/l, <39.2 µg/l and 166 µg/l, respectively.

- TDS concentrations in the influent, mid-point and effluent samples were 99 mg/l, 94 mg/l and 89 mg/l, respectively.
- TSS concentrations in the influent, mid-point and effluent samples were all less than the laboratory reporting limit of 10 mg/l.

**LENOX CHINA FACILITY AND ADJACENT AREA  
POMONA, NEW JERSEY**

**TABLE 1 SECTION 3**

**GAC TREATMENT SYSTEM SAMPLING RESULTS, APRIL 7, 2005**

Sample ID Sample Date	Permit Limits	PO-GAC-INF 4/7/2005	PO-GAC-MID 4/7/2005	PO-GAC-EFF 4/7/2005	Percent Removal
<i>Volatile Organic Compounds (µg/l)</i>					
Trichloroethene (TCE)	1.0	<b>4.7</b>	<0.5 ✓	<0.5 ✓	94.9%*
1,1-Dichloroethene	2.0	<0.5	<0.5	<0.5	NA
cis-1,2-Dichloroethene	2.0	<0.5	<0.5	<0.5	NA
trans-1,2-Dichloroethene	2.0	<0.5	<0.5	<0.5	NA
Vinyl chloride	5.0	<0.5	<0.5	<0.5	NA
<i>Metals (µg/l)</i>					
Iron (Unfiltered)	NL	<b>175</b>	<39.2 ✓	2,670 ✓	NA
Iron (Filtered)	NL	118	<39.2	166	NA
Lead (Unfiltered)	NL	<1.3	<1.3	<b>4.3</b>	NA
Lead (Filtered)	NL	<1.3	<1.3	<1.3	NA
Zinc (Unfiltered)	NL	66.4	<b>24.3</b>	519	NA
Zinc (Filtered)	NL	63.5	<b>27.1</b>	319	NA
TDS (mg/l)	NL	✓99	94 ✓	89 ✓	NA
TSS (mg/l)	NL	≤10	<10 ✓	<10 ✓	NA

**Notes:**

µg/l - Micrograms per liter

NL - No limit

mg/l - Milligrams per liter

NA - Not applicable

\* - Results less than the laboratory minimum detection limit were considered to be one half the minimum detection limit

Values in **bold** exceed the site specific Groundwater Quality Criteria of 1.0 µg/l for TCE.

#### **4.0 DEPTH TO WATER, WATER LEVEL ELEVATIONS, AND TREATMENT SYSTEM FLOW MONITORING (DGW)**

##### **4.1 Depth to Water and Water Level Elevations**

The April 19, 2005 depth to water and water level elevation data is summarized in Table 1, Section 4. Depths to water in the wells on the south and north sides of the plant that screen the same interval as the recovery wells were used to develop the water level elevation and groundwater flow map (Figure 1). As shown in Figure 1, the groundwater flow direction is to the northeast, which is consistent with previous measurements.

The depth to water measurements in the well points installed downgradient of the recovery wells were plotted to develop the water level elevation and groundwater flow direction maps shown in Figures 2 and 3.

##### **4.2 Treatment System Flow Monitoring**

In a letter to Lenox dated April 18, 2000, NJDEP requested that Lenox propose an "Average Daily Volume" (ADV) that would represent the minimum pumping volume required to adequately capture the TCE plume. The ADV would be calculated by dividing the total volume of groundwater extracted by the recovery system each month by the number of days in the month and would be reported quarterly to NJDEP. In a letter to NJDEP dated May 19, 2000, Lenox proposed an ADV of 268,000 gallons per day, which was based on the results of groundwater modeling and the empirical water level and groundwater chemistry data developed since the recovery system started in 1991.

During the period March 1 through March 31, 2005, the calculated ADV was 354,290<sup>✓</sup> gallons per day. During the period April 1 through April 30, 2005, the calculated ADV was 351,906<sup>✓</sup> gallons per day. During the period May 1 through May 31, 2005, the calculated ADV was 348,870<sup>✓</sup> gallons per day.

**LENOX CHINA FACILITY AND ADJACENT AREA  
POMONA, NEW JERSEY**

**TABLE 1 SECTION 4**

**WATER LEVEL MEASUREMENTS, APRIL 19, 2005**

Well No.	Measuring Point Elevation (ft. above mean sea level)	Depth to Water (ft. below MP)	Water Level Elevation (ft. above mean sea level)
P1	65.69	5.08	60.61
P1A	66.32	5.27	61.05
P1B	66.34	5.35	60.99
P5	66.74	4.55	62.19
P5A	66.74	6.05	60.69
P8A	70.02	8.81	61.21
P8B	70.07	8.28	61.79
P9A	70.90	10.11	60.79
P9B	70.97	10.24	60.73
P9C	71.31	10.25	61.06
MW1	69.28	8.68	60.60
MW3	67.09	7.38	59.71
MW4	66.98	5.28	61.70
MW5	64.17	6.57	57.60
MW6	65.08	6.17	58.91
MW7	67.31	7.90	59.41
MW8	67.16	6.92	60.24
MW9	69.51	10.30	59.21
MW10	63.51	4.88	58.63
MW11	63.05	5.55	57.50
MW12D	62.89	5.25	57.64
MW12S	62.62	4.80	57.82
MW13	64.66	6.42	58.24
MW14D	63.63	5.40	58.23
MW14S	63.64	5.33	58.31
MW15	66.07	6.97	59.10
MW16	62.07	4.75	57.32
MW17	62.09	4.63	57.46
MW23	61.49	4.62	56.87
MW23A	61.78	4.90	56.88
MW24	62.60	5.45	57.15
MW25	61.13	4.34	56.79
MW25A	61.29	4.50	56.79
MW25B	61.22	4.42	56.80
MW26A (B30A)	62.48	5.81	56.67
MW26B (B30B)	61.65	5.01	56.64
MW72	64.19	4.99	59.20
MW73	63.06	4.10	58.96
MW74	62.56	4.22	58.34
MW75	60.15	3.91	56.24
MW76	60.60	4.57	56.03
MW77	60.41	4.62	55.79
MW78	59.84	3.68	56.16
MW79A	60.51	4.08	56.43
MW80	62.49	3.46	59.03
MW81	61.90	4.58	57.32
B31	62.19	5.65	56.54
B32	63.29	6.60	56.69
B53	62.31	4.80	57.51
B54	62.39	4.65	57.74
B59	60.02	3.65	56.37
B66	61.71	5.37	56.34
B66A	61.60	5.15	56.45
B66B	61.86	5.37	56.49
B67	62.29	5.97	56.32
B70A	61.39	4.55	56.84
B71	62.31	5.95	56.36
PZ1S	60.27	4.03	56.24
PZ1D	60.52	4.53	55.99
PZ2S	60.52	4.27	56.25
PZ2D	60.70	4.63	56.07
PZ3S	61.47	5.15	56.32
PZ3D	61.60	5.28	56.32
PZ4S	60.80	4.47	56.33
PZ4D	61.09	4.75	56.34
PZ5S	60.47	3.95	56.52
PZ5D	60.56	4.12	56.44
PZ6S	60.79	4.34	56.45
PZ6D	60.73	4.28	56.45

## **5.0 TCE MONITORING PROGRAM (MOA)**

### **5.1 Background**

A groundwater investigation performed at the Lenox China facility between January 1987 and February 1990 by Geraghty & Miller (G&M) identified two TCE plumes emanating from an antecedent drum storage pad and degreaser sump. Both antecedent waste handling areas are no longer in use. A second on-site degreaser sump was removed from service in June 1993. Lenox initiated a quarterly groundwater monitoring program to delineate and track the TCE plumes identified by G&M. The monitoring results were also used to design the GWCAS.

### **5.2 Field Procedures**

Groundwater samples were collected from twenty-two monitoring wells at the Lenox facility and along White Horse Pike as part of the regularly-scheduled monitoring program on April 19-21, 2005. A sample was collected from one additional well, MW-14D, for the purpose of analyzing VOC concentrations in the deep water-bearing zone. All sampling was performed in accordance with the most recently revised (April 1996) GWSAP and SGWSAP approved by the NJDEP.

Each well used to monitor the TCE remediation system contains a three-quarter-inch inner-diameter pump column attached to a one-foot section of well screen. The bottom of the pump column screen is set approximately two feet above the top of the well screen to ensure that the total volume of standing water in the well casing is removed during purging. To purge the wells, a peristaltic pump was attached to the top of the pump column using drinking-water grade polyethylene tubing. Three to five times the volume of standing water in each well was removed and field parameters (pH, specific conductivity, temperature and dissolved oxygen) were monitored during purging. The field parameter data is provided on the well sampling logs in Appendix A. Samples for metals analysis were collected directly from the discharge of the peristaltic pump. A new section of tubing was used for each well to avoid cross-contamination. Samples for VOC analysis were collected with 60 cc Teflon bailers dedicated to each well.

Unfiltered samples were analyzed for VOCs, iron, zinc, lead, TDS and TSS. Filtered samples were analyzed for iron, zinc and lead. MW-12D and MW-14D were analyzed for VOCs only. Field blank and duplicate samples collected during the monitoring program and a trip blank supplied by the laboratory were analyzed for quality assurance purposes. All analyses were performed by Accutest Laboratories, located in Dayton, New Jersey (NJDEP certification No. 12129).

### **5.3 Groundwater Monitoring Results**

The groundwater analytical data is summarized in Tables 1, 2, 3 and 4, Section 5. The extent of TCE in groundwater during the April 2005 monitoring round is shown on Figure 4. The laboratory data reports are provided in Appendix C, which is bound separately.

The April 2005 monitoring results are summarized below:

- For wells sampled on a quarterly basis, TCE concentrations increased in wells MW-12S, MW-12D, MW-25, B-31, B-59, MW-76, MW-78 and MW-81 since the last monitoring round. The largest increase occurred in well B-31 (5.6 µg/l in January 2005 to 6.3 µg/l in April 2005).
- For wells sampled on an annual basis, the TCE concentration increased only in well B-66, from 6.3 µg/l in April 2004 to 35.8 µg/l in April 2005).
- For wells sampled on a quarterly basis, TCE concentrations decreased in wells MW-10, MW-15, MW-77 and MW-79A since the last monitoring round. The largest decrease occurred in well MW-79A (7.0 µg/l in January 2005 to 5.5 µg/l in April 2005).
- For wells sampled on an annual basis, TCE concentrations decreased in wells MW-23, B-32, B-53, B-54 and B-71. The largest decrease occurred in well B-54 (117 µg/l in April 2004 to 88.3 µg/l in April 2005).

- TCE concentrations remained effectively unchanged at less than the laboratory reporting limit in wells MW-1, MW-13, MW-14D, MW-75 and MW-80.
- Cis-1,2-dichloroethene was detected in the samples from wells MW-10, MW-12D, B-31, B-32, MW-77, MW-78 and MW-79A at concentrations ranging from 0.30 µg/l in B-31 to 2.8 µg/l in MW-79A. Trans-1,2-dichloroethene was detected in the sample from well MW-79A at a concentration of 0.75 µg/l. No other TCE breakdown products were detected above laboratory reporting limits in any samples.
- Iron was detected in the unfiltered samples at concentrations ranging from less than the laboratory reporting limit of 100 µg/l to 637 µg/l, with the highest concentration detected in the sample from MW-1. Iron was detected in one filtered sample above the laboratory reporting limit of 100 µg/l (130 µg/l in MW-12S).
- Lead was detected in one unfiltered sample above the laboratory reporting limit of 3.0 µg/l (4.6 µg/l in MW-12S). Lead was not detected in the filtered samples above the laboratory reporting limit of 3.0 µg/l.
- Zinc was detected in the unfiltered samples at concentrations ranging from less than the laboratory reporting limit of 20 µg/l to 120 µg/l, with the highest concentration detected in the sample from MW-25. Zinc was detected in the filtered samples at concentrations ranging from less than the laboratory reporting limit of 20 µg/l to 121 µg/l, with the highest concentration also detected in the sample from MW-25.
- TDS concentrations ranged from less than the laboratory reporting limit of 10 mg/l to 382 mg/l, which was detected in the sample from well MW-12D. TSS concentrations ranged from less than the laboratory reporting limit of 4.0 mg/l to 71.0, which was detected in the sample from well MW-79A.
- There was good agreement between analyte concentrations in the field and duplicate samples (MW-85) from well MW-75.



- TCE, iron, lead, zinc, TDS and TSS were not detected in the field blank samples at concentrations exceeding their respective laboratory reporting limits. No VOCs were detected in the trip blanks at concentrations exceeding laboratory reporting limits.
- Chloroform was detected in the samples from a number of wells, at concentrations ranging from 0.40 µg/l (MW-25) to 4.3 µg/l (MW-81). Chloroform was not detected in the field or trip blanks and is not considered a site-related compound.

The monitoring data indicates that since the last monitoring round, TCE concentrations in samples from the sentinel wells along White Horse Pike increased in wells MW-76 and MW-78, decreased in wells MW-77 and MW-79A, and remained the same in well MW-75 at less than the laboratory reporting limit. The greatest change in concentration occurred at well MW-79A, which decreased from 7.0 µg/l in January 2005 to 5.5 µg/l in April 2005.

**LENOX CHINA FACILITY AND ADJACENT AREA  
POMONA, NEW JERSEY**

**TABLE 1 SECTION 5**

**SUMMARY OF TCE CONCENTRATIONS IN GROUNDWATER - JULY 2002 THROUGH APRIL 2005**

Well	Jan. 21-22, 2004	Apr. 27-29, 2004	Jul. 22-26, 2004	Oct. 18-20, 2004	Jan. 19-21, 2005	April 19-21, 2005
MW1	<0.19	<0.19	<0.20	<0.20	<0.20	<0.20
MW10	<b>3.0</b>	<b>3.9</b>	<b>6.9</b>	<b>7.0</b>	<b>5.3</b>	<b>5.1</b>
MW12S	<b>1.3</b>	<b>1.1</b>	<b>1.0</b>	<b>0.86 J</b>	<b>1.1</b>	<b>1.2</b>
MW12D	-	<b>5.4</b>	-	<b>6.9</b>	<b>6.7</b>	<b>7.0</b>
MW13	<0.19	<0.19	<0.20	<0.20	<0.20	<0.20
MW-14D	-	-	-	<0.20	<0.20	<0.20
MW15	0.96 J	0.69 J	0.46 J	<0.20	0.88 J	0.64 J
MW23	-	<b>8.9</b>	-	-	-	<b>7.9</b>
MW25	<0.19	0.39 J	<0.20	<0.20	<0.20	0.41 J
B31 (MW27)	<b>10.0</b>	<b>8.5</b>	<b>7.7</b>	<b>7.7</b>	<b>5.6</b>	<b>6.3</b>
B32 (MW28)	-	<b>8.5</b>	-	-	-	<b>5.3</b>
B53	-	<b>6.7</b>	-	-	-	<b>4.4</b>
B54	-	<b>117</b>	-	-	-	<b>88.3</b>
B59	<0.19	0.46 J	0.40 J	<0.20	<0.20	0.61 J
B66	-	<b>6.3</b>	-	-	-	<b>35.8</b>
B71	-	<b>2.8</b>	-	-	-	<b>1.2</b>
MW75	<0.19/<0.19	<0.19/<0.19	<0.20/<0.20	<0.20/<0.20	<0.20/<0.20	<0.20/<0.20
MW76	<0.19	0.30 J	0.27 J	<0.20	0.36 J	0.41 J
MW77	<b>1.4</b>	<b>1.3</b>	<b>1.5</b>	<b>1.8</b>	<b>1.9</b>	<b>1.8</b>
MW78	<b>1.3</b>	<b>1.2</b>	<b>1.6</b>	<b>1.8</b>	<b>2.0</b>	<b>2.2</b>
MW79A	<b>5.4</b>	<b>5.2</b>	<b>5.4</b>	<b>5.8</b>	<b>7.0</b>	<b>5.5</b>
MW80	<0.19	<0.19	<0.20	<0.20	<0.20	<0.20
MW81	<0.19	0.27 J	<0.20	<0.20	<0.20	0.33 J
GAC Influent	<b>4.5</b>	<b>5.9</b>	<b>6.1</b>	<b>4.9</b>	<b>4.4</b>	<b>4.7</b>
GAC Effluent	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
GAC Mid-Vessel	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

**Notes:**

All samples analyzed by USEPA Method 624, 601 or 502.2/524.2.

All concentrations are presented in micrograms per liter (ug/l).

- = Not analyzed J = Estimated concentration

Values in **bold font** exceed the site specific Groundwater Quality Criteria for TCE (1.0 ug/l).

Table 1, Section 5 Continued...

Well	Jul. 17-19, 2002	Oct. 15-17, 2002	Jan. 29-30, 2003	Apr. 14-16, 2003	Jul. 22-24, 2003	Oct. 28-30, 2003
MW1	<0.15	<0.15	<0.15	<0.19	<0.19	<0.19
MW10	<b>6.4</b>	<b>6.8</b>	<b>3.9</b>	<0.19	<0.19	<b>5.8</b>
MW12S	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>	<0.19	<0.19	<b>1.3</b>
MW12D	-	-	-	<0.19	-	-
MW13	<0.15	<0.15	<0.15	<0.19	<0.19	<0.19
MW15	<b>1.3</b>	0.59	<b>2.2</b>	<b>1.3</b>	-	-
MW23	-	-	-	<0.19	<0.19	0.67 J
MW25	<b>4.1</b>	<b>3.4</b>	<b>2.5</b>	<b>1.5</b>	-	-
B31 (MW27)	<b>1.8</b>	<b>6.6</b>	<b>24.4</b>	<b>26.1</b>	<b>1.1</b>	<b>0.86 J</b>
B32 (MW28)	-	-	-	<b>3.4</b>	<b>15.7</b>	<b>10.7</b>
B53	-	-	-	<b>10.3</b>	-	-
B54	-	-	-	<b>75.4</b>	-	-
B59	0.60	<0.15	0.62 J	0.71 J	-	-
B66	-	-	-	<b>37.7</b>	0.96 J	<0.19
B70A	-	-	-	-	-	-
B71	-	-	-	<b>1.2</b>	-	-
MW75	<0.15/<0.15	<0.15/<0.15	<0.15/<0.15	<0.19/<0.19	<0.19/<0.19	<0.19/<0.19
MW76	<0.15	<0.15	0.39 J	<0.19	<0.19	<0.19
MW77	<b>2.5</b>	<b>1.9</b>	<b>2.3</b>	<b>1.9</b>	0.67 J	<b>1.7</b>
MW78	<b>1.6</b>	<b>1.0</b>	<b>1.7</b>	<b>1.8</b>	<b>1.1</b>	<b>1.4</b>
MW79A	<b>6.0</b>	<b>3.7</b>	<b>6.4</b>	<b>3.8</b>	<0.19	<b>6.0</b>
MW80	<0.15	<0.15	<0.15	<0.19	<0.19	<0.19
MW81	0.62	0.53	0.50 J	<0.19	<0.19	<0.19
GAC Influent	<b>8.7</b>	<b>7.6</b>	<b>5.6</b>	<b>9.91</b>	<b>20.22</b>	<b>7.6</b>
GAC Effluent	<0.26	<0.26	<0.26	<0.26	<0.26	<0.5
GAC Mid-Vessel	<b>1.0</b>	<0.26	<0.26	0.37	<0.26	<0.5

## Notes:

All samples analyzed by USEPA Method 624, 601 or 502.2/524.2.

All concentrations are presented in micrograms per liter (ug/l).

- = Not analyzed J = Estimated concentration

Values in **bold** font exceed the site specific Groundwater Quality Criteria for TCE (1.0 ug/l).

**LENOX CHINA FACILITY AND ADJACENT AREA  
POMONA, NEW JERSEY**

**TABLE 2 SECTION 5**

**TCE AND ASSOCIATED BREAKDOWN PRODUCT CONCENTRATIONS, APRIL 19-21, 2005**

Well	TCE	cis-DCE	trans-DCE	1,1-DCE	Vinyl Chloride
MW-1	<0.20 ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-10	<b>5.1</b> ✓	0.99 J ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-12S	<b>1.2</b> ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-12D	<b>7.0</b> ✓	0.95 J ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-13	<0.20 ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-14D	<0.20 ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-15	0.64 J ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-23	<b>7.9</b> ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-25	0.41 J ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-31	<b>6.3</b> ✓	0.30 J ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-32	<b>5.3</b> ✓	0.45 J ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-53	<b>4.4</b> ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-54	<b>88.3</b> ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-59	0.61 J ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-66	<b>35.8</b> ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
B-71	<b>1.2</b> ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-75	<0.20 ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-85 (Dup MW-75)	<0.20 ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-76	0.41 J ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-77	<b>1.8</b> ✓	1.2 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-78	<b>2.2</b> ✓	0.63 J ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-79A	<b>5.5</b> ✓	2.8 ✓	0.75 J ✓	<0.35 ✓	<0.27 ✓
MW-80	<0.20 ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓
MW-81	0.33 J ✓	<0.15 ✓	<0.28 ✓	<0.35 ✓	<0.27 ✓

**Notes:**

All concentrations are presented in micrograms per liter (µg/l).

J = Estimated concentration.

Values in **bold** exceed the site specific Groundwater Quality Criteria for TCE (1.0 µg/l).

**LENOX CHINA FACILITY AND ADJACENT AREAS  
POMONA, NEW JERSEY**

**TABLE 3 SECTION 5**

**INORGANIC ANALYTE CONCENTRATIONS, APRIL 2005**

Well No.	MW-1	MW-10	MW-12S	MW-12D	MW-13	MW-15	MW-23	MW-25	B-31	B-32	B-53	B-54
Date Sampled	4/21/05	4/21/05	4/20/05	4/20/05	4/20/05	4/19/2005	4/20/05	4/20/05	4/19/05	4/19/05	4/20/05	4/20/05
Metals (µg/l)												
Iron (Unfiltered)	637	122	<100 ✓	<100 ✓	<100 ✓	269 ✓	110 ✓	<100 ✓	<100 ✓	<100 ✓	197 ✓	<100 ✓
Iron (Filtered)	<100	<100	130 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Lead (Unfiltered)	<3.0	<3.0	<b>14.6</b> ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0	<3.0	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20	<20	<20 ✓	<20 ✓	<20 ✓	<b>92.0</b> ✓	<b>27.6</b> ✓	<b>120</b> ✓	<b>74.7</b> ✓	<20 ✓	<20 ✓	<20 ✓
Zinc (Filtered)	<20	<20	<20 ✓	<20 ✓	<20 ✓	<b>96.8</b> ✓	<b>30.4</b> ✓	<b>121</b> ✓	<b>66.1</b> ✓	<20 ✓	<20 ✓	<20 ✓
TDS (mg/l)	67	234	74 ✓	382 ✓	90 ✓	147 ✓	126 ✓	27 ✓	88 ✓	108 ✓	43 ✓	66 ✓
TSS (mg/l)	<4.0	<4.0	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	10 ✓	<4.0 ✓

**Notes:**

µg/l = Micrograms per liter.

mg/l = Milligrams per liter.

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) or Zinc (36.7 µg/l).

Table 3, Section 5 Continued ...

Well No.	B-59	B-66	B-71	MW-75	MW-85*	MW-76	MW-77	MW-78	MW-79A	MW-80	MW-81
Date Sampled	4/20/05	4/19/05	4/19/05	4/19/05	4/19/2005	4/19/05	4/19/05	4/19/05	4/19/05	4/19/05	4/20/05
Metals (µg/l)											
Iron (Unfiltered)	<100 ✓	<100 ✓	133 ✓	<100 ✓	<100 ✓	120 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Iron (Filtered)	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Lead (Unfiltered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓
Zinc (Filtered)	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓
TDS (mg/l)	88 ✓	66 ✓	22 ✓	<10 ✓	<10 ✓	85 ✓	14 ✓	10 ✓	88 ✓	71 ✓	25 ✓
TSS (mg/l)	<4.0 ✓	<4.0 ✓	12 ✓	7.0 ✓	6.0 ✓	<4.0 ✓	<4.0 ✓	6.0 ✓	71 ✓	<4.0 ✓	<4.0 ✓

## Notes:

\* MW-85 is duplicate of MW-75.

µg/l = Micrograms per liter.

mg/l = Milligrams per liter.

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) or Zinc (36.7 µg/l).

**LENOX CHINA FACILITY AND ADJACENT AREAS  
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**TABLE 4 SECTION 5**

**QUALITY ASSURANCE/QUALITY CONTROL SAMPLES, APRIL 19-21, 2005**

Sample ID Sample Matrix Date	FB-1 Field Blank 4/19/2005	FB-2 Field Blank 4/20/2005	FB Field Blank 4/21/2005	TB-1 Trip Blank 4/20/2005	TB Trip Blank 4/21/2005
Trichloroethene	<0.20 ✓	<0.20 ✓	<0.20 ✓	<0.20 ✓	<0.20 ✓
Iron (Unfiltered)	<100 ✓	<100 ✓	<100 ✓	NA	NA
Iron (Filtered)	<100 ✓	<100 ✓	<100 ✓	NA	NA
Lead (Unfiltered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	NA	NA
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	NA	NA
Zinc (Unfiltered)	<20 ✓	<20 ✓	<20 ✓	NA	NA
Zinc (Filtered)	<20 ✓	<20 ✓	<20 ✓	NA	NA
TDS (mg/l)	<10 ✓	<10 ✓	<10 ✓	NA	NA
TSS (mg/l)	<4.0 ✓	<4.0 ✓	<4.0 ✓	NA	NA

**Notes:**

All concentrations presented in micrograms per liter (µg/l), unless otherwise noted.

mg/l = Milligrams per liter.

NA = Not Analyzed

## **6.0 SOLID WASTE MANAGEMENT UNIT NO. 2 AND AREA OF CONCERN GROUNDWATER MONITORING PROGRAM (MOA)**

The groundwater sampling data from monitoring wells MW-10, MW-17, MW-72, MW-73 and MW-74 are used to assess groundwater quality downgradient of Solid Waste Management Unit (SWMU) No. 2 and the Area of Concern (AOC). Unfiltered and filtered samples from these wells were analyzed for lead and zinc. The groundwater analytical data is summarized in Table 1, Section 6. The laboratory data reports are included in Appendix C.

The April 2005 monitoring results are summarized below:

- Lead was detected in the unfiltered samples at concentrations ranging from less than the laboratory reporting limit of 3.0 to 30.1 µg/l, with the highest concentration detected in the sample from MW-73. Lead was not detected in the filtered samples at concentrations exceeding the laboratory reporting limit of 3.0 µg/l.
- Zinc was detected in the unfiltered samples at concentrations ranging from less than the laboratory reporting limit of 20 to 111 µg/l, with the highest concentration detected in the sample from MW-17. Zinc was detected in the filtered samples at concentrations ranging from less than the laboratory reporting limit of 20 to 113 µg/l, with the highest concentration detected in the sample from MW-17.



**LENOX CHINA FACILITY AND ADJACENT AREAS  
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**TABLE 1 SECTION 6**

**SWMU NO. 2 AND AOC GROUNDWATER MONITORING RESULTS, APRIL 2005**

Well No.	MW-10	MW-17	MW-72	MW-73	MW-74
Date Sampled	4/21/05	4/20/05	4/20/05	4/20/05	4/20/05
Lead (Unfiltered)	<3.0 ✓	<3.0 ✓	19.7 ✓	30.1 ✓	5.4 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	111 ✓	51.8 ✓	36.0 ✓	88.9 ✓
Zinc (Filtered)	<20 ✓	113 ✓	<20 ✓	29.1 ✓	37.2 ✓

**Notes:**

All concentrations presented in micrograms per liter (µg/l).

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) and Zinc (36.7 µg/l).

## **7.0 CLASSIFICATION EXCEPTION AREA/ STATISTICAL ANALYSIS PROGRAM (MOA)**

The groundwater sampling data from MW-1, MW-3F, MW-6F, MW-12S, MW-13, MW-73, MW-74, MW-75 and MW-79A is used to assess groundwater quality downgradient of the Lenox facility. Unfiltered and filtered samples from these wells were analyzed for lead and zinc. The groundwater analytical results are summarized in Table 1, Section 7. The laboratory data reports are included in Appendix C.

The April 2005 results for the Classification Exception Area (CEA) monitoring program are summarized below:

- Lead concentrations in the unfiltered samples ranged from less than the laboratory reporting limit of 3.0  $\mu\text{g/l}$  to 30.1  $\mu\text{g/l}$  (MW-73). Lead was detected in only one of the filtered samples at a concentration exceeding the laboratory reporting limit of 3.0  $\mu\text{g/l}$  (4.8  $\mu\text{g/l}$  in MW-6F).
- Zinc concentrations in the unfiltered samples ranged from less than the laboratory reporting limit of 20  $\mu\text{g/l}$  to 88.9  $\mu\text{g/l}$  (MW-74). Zinc concentrations in the filtered samples ranged from less than the laboratory reporting limit of 20  $\mu\text{g/l}$  to 37.2  $\mu\text{g/l}$  (MW-74).
- TCE concentrations in all monitoring wells, as summarized in Table 1, Section 5, ranged from less than the laboratory reporting limit of 0.20  $\mu\text{g/l}$  to 88.3  $\mu\text{g/l}$ , with the highest concentration in the sample from well B-54. TCE concentrations in the sentinel wells along the White Horse Pike ranged from less than the 0.20  $\mu\text{g/l}$  laboratory reporting limit in well MW-75 to 5.5  $\mu\text{g/l}$  in well MW-79A.

In accordance with the CEA monitoring program, the sentinel well TCE monitoring data collected during the past eight consecutive quarters was statistically analyzed using the Mann-Whitney U-Test. The results are summarized in Table 2, Section 7. The null hypothesis was accepted at the 90 percent confidence level ( $U > 3$ ) for all five wells: MW-75, MW-76, MW-77,

MW-78 and MW-79A, indicating that TCE concentrations at these wells have statistically remained the same or increased over the past eight monitoring periods. MW-75 has not contained any detectable concentrations of TCE for the past twenty-three consecutive quarters.

**LENOX CHINA FACILITY AND ADJACENT AREAS  
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**TABLE 1 SECTION 7**

**CEA GROUNDWATER MONITORING RESULTS, APRIL 2005**

Well No.	MW-1	MW-3F	MW-6F	MW-12S	MW-13
Date Sampled	4/21/05	4/20/05	4/20/05	4/20/05	4/20/05
Lead (Unfiltered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	4.6 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	4.8 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓
Zinc (Filtered)	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓

Well No.	MW-73	MW-74	MW-75	MW-79A
Date Sampled	4/20/05	4/20/05	4/19/05	4/19/05
Lead (Unfiltered)	<b>30.1</b> ✓	<b>35.4</b> ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<b>36.0</b> ✓	<b>88.9</b> ✓	<20 ✓	<20 ✓
Zinc (Filtered)	<b>29.1</b> ✓	<b>37.2</b> ✓	<20 ✓	<20 ✓

**Notes:**

All concentrations presented in micrograms per liter (µg/l).

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) and Zinc (36.7 µg/l).

**LENOX CHINA FACILITY AND ADJACENT AREAS  
POMONA, NEW JERSEY**

**TABLE 2 SECTION 7**

**MANN-WHITNEY STATISTICAL TEST SUMMARY**

Sentinel Well	Eighth Quarter Ending Date					
	Jan-05			Apr-05		
	Ua	Ub	U	Ua	Ub	U
MW-75	16	0	8	16	0	8
MW-76	16	12	14	14	11	12.5
MW-77	10	9	9.5	-	-	15
MW-78	12	11	11.5	-	-	16
MW-79A	12	11	11.5	13	12	12.5

**Notes:**

Null hypothesis will be accepted at the 90% confidence level  
when the calculated U value is greater than 3.

If two or more concentrations are identical the test is calculated twice,  
once ranking the identical "a" concentrations first (Ua) and once  
ranking the "b" concentrations first (Ub). The average of these values  
is the actual "U". (N.J.A.C. 7:26 E App. C)

## **8.0 RESIDENTIAL WELL SAMPLING**

Following discussions with NJDEP and USEPA in 2001, Lenox agreed to develop and coordinate a sampling program with the Atlantic County Department of Public Health (ACDPH) to assess and track TCE and breakdown product concentrations at residential wells located downgradient of the White Horse Pike (Route 30). Lenox initiated the sampling during the fourth quarter of 2001 at the first three homes immediately downgradient of the White Horse Pike that were not served by public water. A fourth residence was added in January 2003 and is included in the list below. In accordance with the plan developed by Lenox, the sampling results are provided to ACDPH, which in turn provides any significant data directly to the homeowners and the USEPA.

The residences covered by the current quarterly sampling program are shown on Figure 5 and are identified as follows:

- RESW-1, 360 S. Mannheim Avenue
- RESW-2, 357 S. Mannheim Avenue
- RESW-3, 353 S. Mannheim Avenue
- RESW-4, 344 S. Mannheim Avenue

Private wells at homes further north and west of Mannheim Avenue are not included in the sampling program due to their distance from White Horse Pike. The wells were sampled on April 20, 2005. Please note that RESW-3 was not sampled during this period. Repeated attempts were made to contact the homeowner but no response was obtained and no working sampling ports are available on the outside of the house. The residential well samples were analyzed using EPA method 524.2 for drinking water. A trip blank was included in the sample shipment and also analyzed using the same method. The current and historical sampling data is summarized in Tables 1 and 2, Section 8. Laboratory data reports are included in Appendix C. The second quarter monitoring results are summarized below:

- TCE was detected at a concentration of 0.52  $\mu\text{g/l}$  in RESW-1. TCE was not detected in the other samples at concentrations above the laboratory reporting limit. ~~Cis~~-1,2-dichloroethane, a TCE breakdown product, was detected in the sample from RESW-1 at a concentration of 0.11  $\mu\text{g/l}$ . TCE breakdown products were not detected in any other samples at concentrations exceeding the laboratory reporting limits.
- Chloroform was detected in three samples at concentrations of 6.8  $\mu\text{g/l}$  (RESW-1), 0.39  $\mu\text{g/l}$  (RESW-2) and 0.14  $\mu\text{g/l}$  (RESW-4). Chloroform is not considered a site-related compound.
- Methyl tert-butyl ether (MTBE) was detected in the sample from RESW-4 (1.4  $\mu\text{g/l}$ ). MTBE is not considered a site-related compound.
- Benzene and p-dichlorobenzene were detected in the sample from RESW-2 at concentrations of 0.24  $\mu\text{g/l}$  and 0.19  $\mu\text{g/l}$ , respectively. Benzene and p-dichlorobenzene are not considered to be site-related compounds.
- No analytes were detected in the trip blank at concentrations exceeding laboratory reporting limits.

The RESW-1 residence was connected to the municipal water supply system on August 20, 2002.

LENOX CHINA  
POMONA, NEW JERSEY

TABLE 1 SECTION 8

RESIDENTIAL WELL SAMPLING RESULTS, APRIL 20, 2005

Well ID	RESW-1	RESW-2	RESW-4	TB-2
Acetone	-	-	-	-
2-Butanone	-	-	-	-
Benzene	-	0.24 J ✓	-	-
Bromobenzene	-	-	-	-
Bromochloromethane	-	-	-	-
Bromodichloromethane	-	-	-	-
Bromoform	-	-	-	-
Bromomethane	-	-	-	-
n-Butylbenzene	-	-	-	-
sec-Butylbenzene	-	-	-	-
tert-Butylbenzene	-	-	-	-
Carbon disulfide	-	-	-	-
Chlorobenzene	-	-	-	-
Chloroethane	-	-	-	-
Chloroform	6.8 ✓	0.39 J ✓	0.14 J ✓	-
Chloromethane	-	-	-	-
o-Chlorotoluene	-	-	-	-
p-Chlorotoluene	-	-	-	-
Carbon tetrachloride	-	-	-	-
1,1-Dichloroethane	-	-	-	-
1,1-Dichloroethene	-	-	-	-
1,1-Dichloropropene	-	-	-	-
1,2-Dibromo-3-chloropropane	-	-	-	-
1,2-Dibromoethane	-	-	-	-
1,2-Dichloroethane	-	-	-	-
1,2-Dichloropropane	-	-	-	-
1,3-Dichloropropane	-	-	-	-
2,2-Dichloropropane	-	-	-	-
Dibromochloromethane	-	-	-	-
Dibromomethane	-	-	-	-
Dichlorodifluoromethane	-	-	-	-
Cis-1,3-Dichloropropene	-	-	-	-
m-Dichlorobenzene	-	-	-	-
o-Dichlorobenzene	-	-	-	-
p-Dichlorobenzene	-	0.19 J ✓	-	-
Trans-1,2-Dichloroethene	-	-	-	-
Cis-1,2-Dichloroethene	0.11 J ✓	-	-	-
Trans-1,3-Dichloropropene	-	-	-	-
Ethylbenzene	-	-	-	-
Hexachlorobutadiene	-	-	-	-
Hexane	-	-	-	-
2-Hexanone	-	-	-	-
Isopropylbenzene	-	-	-	-
p-Isopropylbenzene	-	-	-	-
Methylene Chloride	-	-	-	-
Methyl Tert Butyl Ether	-	-	1.4 ✓	-
4-Methyl-2-Pentanone	-	-	-	-
Naphthalene	-	-	-	-
n-Propylbenzene	-	-	-	-
Styrene	-	-	-	-
1,1,1,2-Tetrachloroethane	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-
1,2,3-Trichlorobenzene	-	-	-	-
1,2,3-Trichloropropane	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-
1,2,4-Trimethylbenzene	-	-	-	-
1,3,5-Trimethylbenzene	-	-	-	-
Toluene	-	-	-	-
Trichloroethene	0.52 ✓	-	-	-
Trichlorofluoromethane	-	-	-	-
Vinyl Chloride	-	-	-	-
Xylenes, total	-	-	-	-

Notes: All concentrations presented in micrograms per liter (ug/l).

- = Parameter not detected above laboratory detection limit.

Residential samples and trip blank (TB-2) analyzed by EPA Method 524.2, Rev. 4.1



LENOX CHINA  
POMONA, NEW JERSEY

TABLE 2 SECTION 8

**HISTORICAL RESIDENTIAL WELL SAMPLING RESULTS THROUGH APRIL 2005**  
**(DETECTED COMPOUNDS ONLY)**

Sample ID	Date	Acetone	Benzene	Carbon Disulfide	Chloroform	Chlorobenzene	Cis-1,2-Dichloroethene	m-Dichlorobenzene	p-Dichlorobenzene	Ethylbenzene	MTBE	Toluene	Trichloroethene	Xylenes (total)
RESW-1	3/19/2002	-	-	-	5.0	-	-	-	-	-	-	-	1.4	-
	5/16/2002	-	-	-	3.6	-	-	-	-	-	-	-	1.5	-
	7/18/2002	-	-	-	4.1	-	-	-	-	-	-	-	1.2	-
	10/16/2002	-	-	-	4.2	-	-	-	-	-	0.29	-	0.88	-
	1/29/2003	-	-	-	6.6	-	-	-	-	-	-	-	-	-
	4/14/2003	-	-	-	4.9	-	-	-	-	-	-	-	0.56	-
	7/23/2003	-	-	-	5.5	-	-	-	-	-	-	-	1.1	-
	10/30/2003	-	-	-	7.9	-	-	-	-	-	-	-	0.53	-
	1/21/2004	-	-	-	6.5	-	-	-	-	-	-	-	0.54	-
	4/28/2004	-	-	-	7.2	-	-	-	-	-	-	-	0.65	-
	7/23/2004	-	-	-	6.6	-	-	-	-	-	1.4	-	0.39 J	-
	10/20/2004	-	-	-	8.5	-	-	-	-	-	0.19 J	-	0.21 J	-
	1/20/2005	6.6	-	-	6.6	-	-	-	-	0.16 J	0.70	0.065 J	0.50	0.62
	4/20/2005	-	-	-	6.8✓	-	0.11 J✓	-	-	-	-	-	0.52✓	-
RESW-2	3/19/2002	-	1.3	-	0.72	-	-	-	0.26	-	-	-	-	-
	5/16/2002	-	0.88	-	0.51	-	-	-	0.33	-	-	-	-	-
	7/18/2002	-	0.96	-	0.38	-	-	-	0.38	-	-	-	-	-
	10/16/2002	-	1.4	-	0.29	-	-	0.071	0.33	-	-	-	-	-
	1/29/2003	-	1.4	-	0.25 J	-	-	-	0.26 J	-	-	-	-	-
	4/14/2003	-	1.4	-	0.28 J	0.098 J	-	0.10 J	0.52	-	-	-	-	-
	7/23/2003	-	0.78	-	-	-	-	-	-	-	-	-	-	-
	10/30/2003	-	0.52	-	0.68	-	-	-	0.31 J	-	-	-	-	-
	1/21/2004	-	0.60	-	0.49 J	-	-	-	-	-	-	-	-	-
	4/28/2004	-	0.55	1.2	0.52	-	-	-	-	-	-	-	-	-
	7/23/2004	-	0.29 J	-	0.52	-	-	-	-	-	0.20 J	-	-	-
	10/20/2004	-	0.22 J	-	0.40 J	-	-	-	0.14 J	-	-	-	-	-
	1/20/2005	-	0.30 J	-	0.29 J	-	-	-	0.099 J	-	0.088 J	-	-	-
	4/20/2005	-	0.24 J✓	-	0.39 J✓	-	-	-	0.19 J✓	-	-	-	-	-

Notes:

All concentrations presented in micrograms per liter (ug/l).

- = Not detected above laboratory detection limit.

J = Estimated concentration. NS = Not sampled.

Values in **bold** font exceed the site specific Groundwater Quality Criteria for TCE (1.0 ug/l).

Table 2, Section 8 Continued...

Sample ID	Date	Acetone	Benzene	Carbon Disulfide	Chloroform	Chloro benzene	Cis-1,2-Dichloro ethene	m-Dichloro benzene	p-Dichloro benzene	Ethyl benzene	MTBE	Toluene	Trichloro ethene	Xylenes (total)
RESW-3	3/19/2002	-	-	-	3.1	-	-	-	-	-	-	-	-	-
	6/4/2002	-	-	-	2.7	-	-	-	-	-	-	-	-	-
	7/18/2002	-	-	-	2.6	-	-	-	-	-	-	-	-	-
	10/16/2002	-	-	-	2.4	-	-	-	-	-	-	-	-	-
	1/29/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/16/2003	-	-	-	2.4	-	-	-	-	-	-	-	-	-
	7/23/2003	-	-	-	2.9	-	-	-	-	-	-	-	-	-
	10/30/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/21/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/28/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/23/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2004	-	-	-	1.9	-	-	-	-	-	-	-	-	-
	1/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/20/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RESW-4	1/29/2003	-	-	-	0.29 J	-	-	-	-	-	1.3	-	-	-
	4/14/2003	-	-	-	0.22 J	-	-	-	-	-	1.3	-	-	-
	7/23/2003	-	-	-	-	-	-	-	-	-	1.7	-	-	-
	10/30/2003	-	-	-	-	-	-	-	-	-	2.3	-	-	-
	1/21/2004	-	-	-	-	-	-	-	-	-	1.8	-	-	-
	4/28/2004	-	-	-	-	-	-	-	-	-	2.3	-	-	-
	7/23/2004	-	-	-	-	-	-	-	-	-	2.6	-	-	-
	10/20/2004	-	-	-	-	-	-	-	-	-	1.9	-	-	-
	1/20/2005	-	-	-	0.15 J	-	-	-	-	-	1.7	-	-	-
	4/20/2005	-	-	-	0.14 J✓	-	-	-	-	-	1.4✓	-	-	-

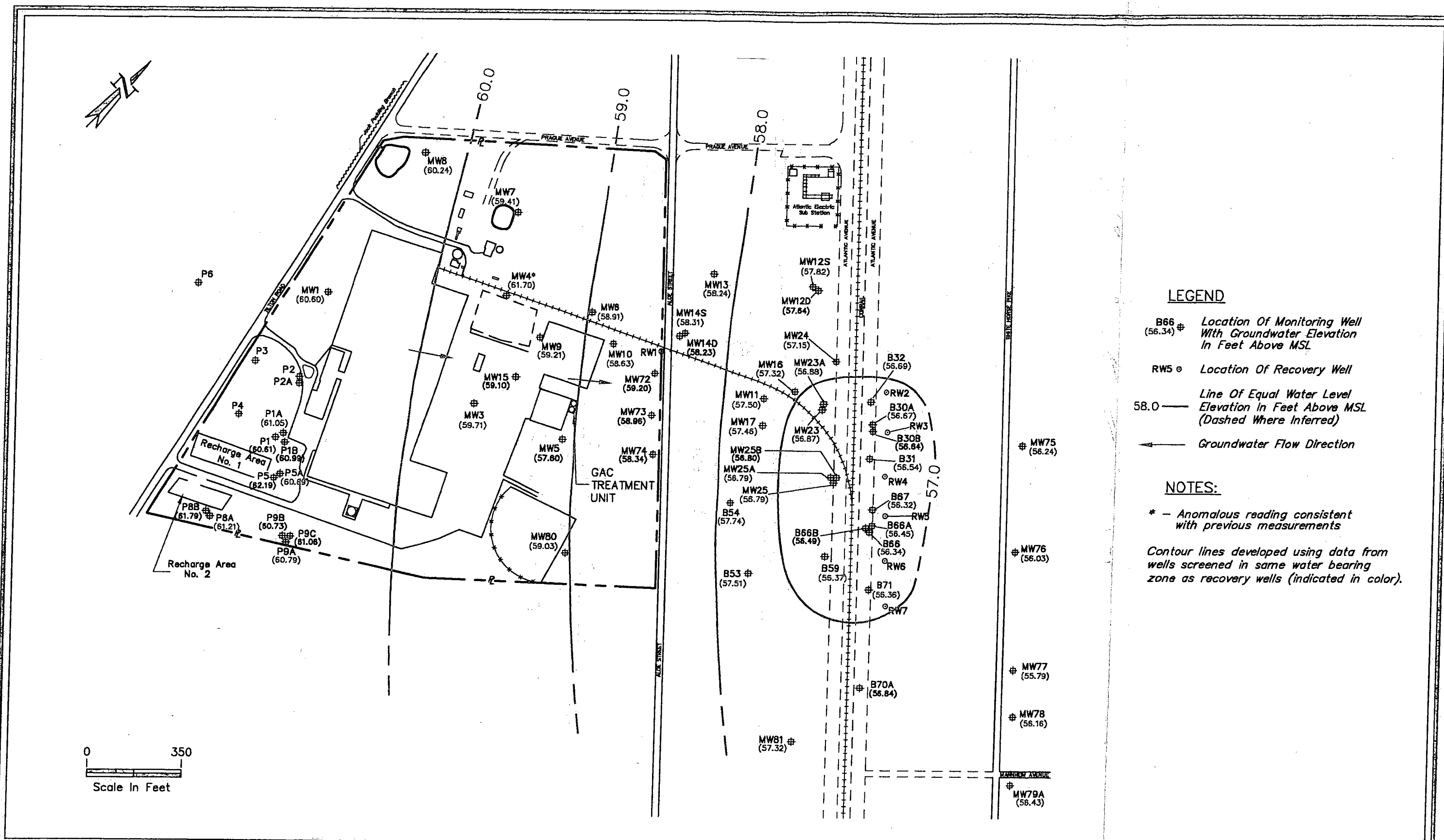
## Notes:

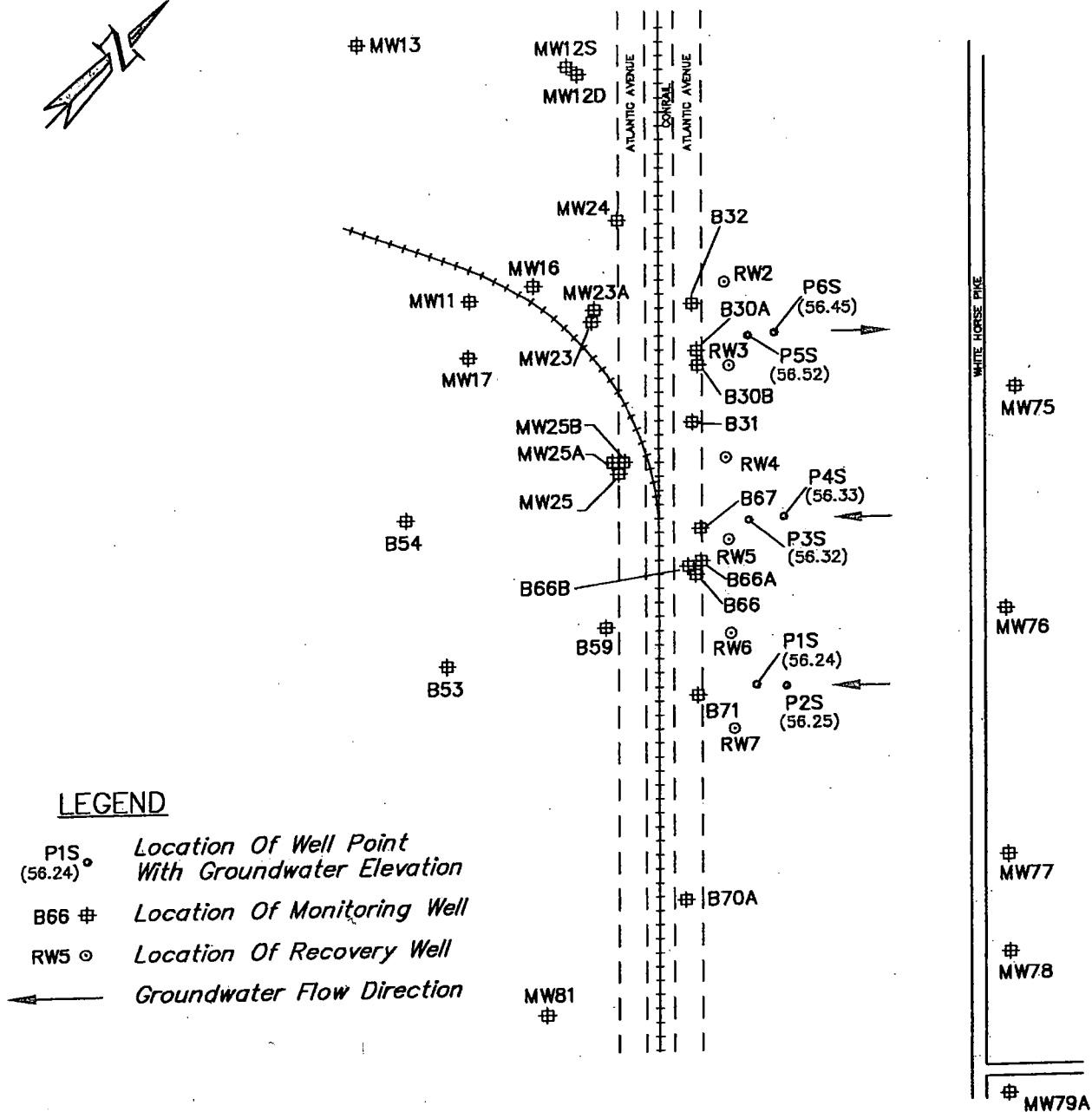
All concentrations presented in micrograms per liter (ug/l).

- = Not detected above laboratory detection limit.

J = Estimated concentration. NS = Not sampled.

Values in **bold** font exceed the site specific Groundwater Quality Criteria for TCE (1.0 ug/l).





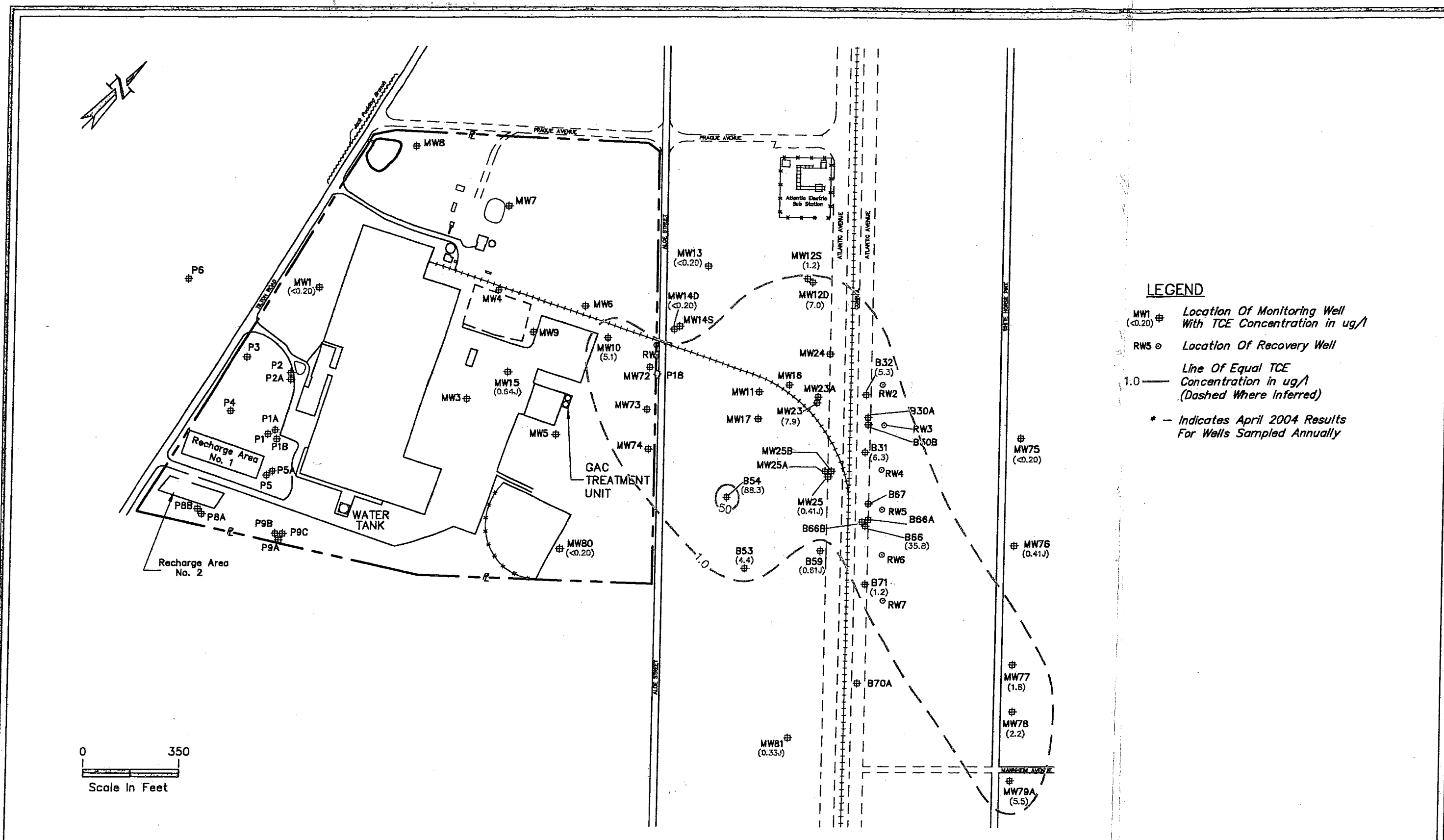
**FIGURE NO: 2 GROUNDWATER FLOW MAP, SHALLOW WELLS  
APRIL 19, 2005**

LENOX CHINA  
POMONA, NEW JERSEY



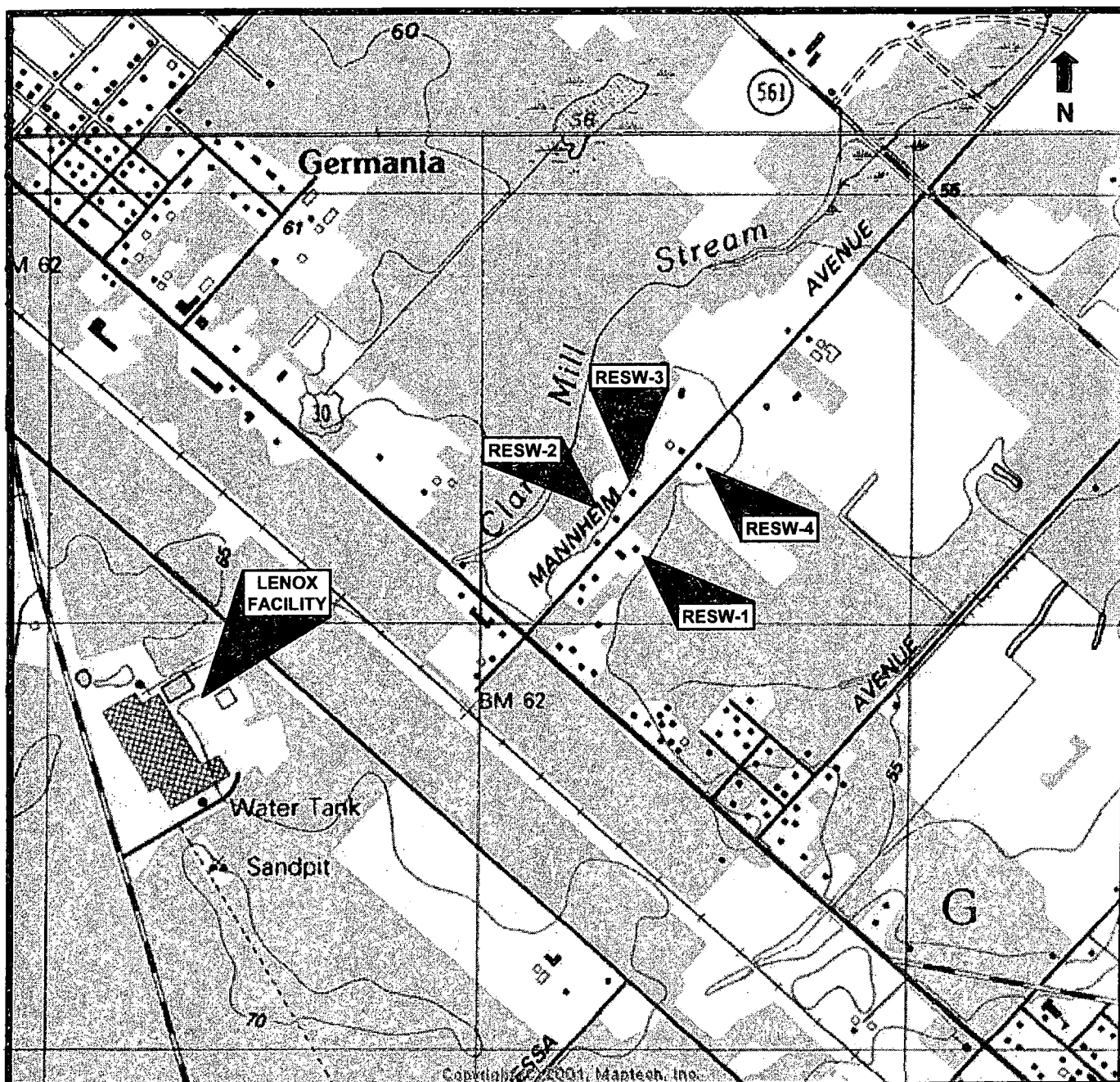
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ENGINEERS AND PLANNERS  
PRINCETON, NEW JERSEY





**FIGURE NO: 4 EXTENT OF TRICHLOROETHYLENE IN GROUNDWATER, APRIL 19-21, 2005**  
 LENOX CHINA  
 POMONA, NEW JERSEY

Source: Base Map Obtained From Geraghty & Miller's August 1992 Groundwater Monitoring Report



**FIGURE NO: 5**  
**RESIDENTIAL WELL SAMPLING LOCATIONS**  
**LENOX CHINA**  
**POMONA, NEW JERSEY**

Approximate Scale: 1 inch = 1,200 feet

Source Map: USGS 7.5 Minute Series, Topo Map - Pleasantville, NJ 1989



**Gannett Fleming**

ENGINEERS AND PLANNERS  
 PRINCETON, NEW JERSEY

**APPENDIX A**

**WELL SAMPLING LOGS**



# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-3F

Well Use: Monitoring

Sample ID: MW-3F

Sample Date: 4/20/05

Sample Time: 7:38

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 2.93 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 17.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

$\Delta$  h: 14.47 feet

Volume of Standing Water: 2.32 gallons

Volume to be removed: 6.96 gallons

Actual Volume removed: 7.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 1.0 gpm

Purge Start: 7:31

Purge Time: 7 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
7:33	2	4.98	0.147	4.1	9.2
7:35	4	4.97	0.149	3.6	9.2
7:37	6	4.95	0.145	3.2	8.9

Depth to water after purge: 3.19 ft. below m.p.

Time: 7:38

Depth to water prior to sampling: 3.19 ft. below m.p.

Time: 7:38

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-6F

Well Use: Monitoring

Sample ID: MW-6F ✓

Sample Date: 4/20/05

Sample Time: 8:00 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 12.66 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 23.87 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 11.21 feet

Volume of Standing Water: 1.79 gallons

Volume to be removed: 5.37 gallons

Actual Volume removed: 6.00 gallons ✓

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 1.0 gpm

Purge Start: 7:54

Purge Time: 6 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
7:56	2	4.85	0.150	3.4	10.3
7:58	4	4.84	0.150	2.6	10.1
8:00	6	4.85	0.152	3.1	10.1

Depth to water after purge: 12.68 ft. below m.p.

Time: 8:00 ✓

Depth to water prior to sampling: 12.68 ft. below m.p.

Time: 8:00

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-12S

Well Use: Monitoring

Sample ID: MW-12S

Sample Date: 4/20/05

Sample Time: 13:32 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.80 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 61.20 feet

Volume of Standing Water: 9.79 gallons

Volume to be removed: 29.37 gallons

Actual Volume removed: 30.00 gallons ✓

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.3 gpm

Purge Start: 13:25

Purge Time: 7 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
13:27	10	5.01	0.199	0.0	12.9
13:29	20	5.01	0.200	0.0	12.7
13:31	30	5.00	0.200	0.0	12.7

Depth to water after purge: 4.95 ft. below m.p.

Time: 13:32 ✓

Depth to water prior to sampling: 4.95 ft. below m.p.

Time: 13:32

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-12D

Well Use: Monitoring

Sample ID: MW-12D

Sample Date: 4/20/05

Sample Time: 13:48

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.25 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 91.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

$\Delta$  h: 86.25 feet

Volume of Standing Water: 13.80 gallons

Volume to be removed: 41.40 gallons

Actual Volume removed: 45.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.1 gpm

Purge Start: 13:37

Purge Time: 11 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
13:40	10	5.17	0.535	0.0	12.7
13:42	20	5.18	0.526	0.0	12.6
13:44	30	5.19	0.522	0.0	12.6
13:46	40	5.17	0.517	0.0	12.6

Depth to water after purge: 5.35 ft. below m.p.

Time: 13:48

Depth to water prior to sampling: 5.35 ft. below m.p.

Time: 13:48

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-13

Well Use: Monitoring

Sample ID: MW-13

Sample Date: 4/20/05

Sample Time: 13:10 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 6.42 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 61.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 54.98 feet

Volume of Standing Water: 8.80 gallons

Volume to be removed: 26.40 gallons

Actual Volume removed: 30.00 gallons ✓

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.3 gpm

Purge Start: 13:03

Purge Time: 7 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
13:05	10	4.96	0.173	3.7	13.6
13:07	20	4.96	0.174	3.6	13.4
13:09	30	4.95	0.174	3.5	13.4

Depth to water after purge: 6.46 ft. below m.p.

Time: 13:10 ✓

Depth to water prior to sampling: 6.46 ft. below m.p.

Time: 13:10

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-14D

Well Use: Monitoring

Sample ID: MW-14D

Sample Date: 4/20/05

Sample Time: 12:49

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 85.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

$\Delta$  h: 79.60 feet

Volume of Standing Water: 12.74 gallons

Volume to be removed: 38.22 gallons

Actual Volume removed: 40.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.0 gpm

Purge Start: 12:39

Purge Time: 10 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
12:41	10	4.97	0.276	2.3	15.6
12:44	20	4.99	0.255	2.7	15.5
12:46	30	4.99	0.248	2.7	15.4
12:48	40	5.00	0.246	2.9	15.3

Depth to water after purge: 5.44 ft. below m.p.

Time: 12:49

Depth to water prior to sampling: 5.44 ft. below m.p.

Time: 12:49

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-15

Well Use: Monitoring

Sample ID: MW-15

Sample Date: 4/19/05

Sample Time: 17:56✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 6.97 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 21.52 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 14.55 feet

Volume of Standing Water: 2.33 gallons

Volume to be removed: 6.99 gallons

Actual Volume removed: 15.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 2.5 gpm

Purge Start: 17:50

Purge Time: 6 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
17:51	5	4.15	0.272	4.7	13.0
17:53	10	4.14	0.275	4.9	12.9
17:55	15	4.17	0.281	4.4	12.9

Depth to water after purge: 6.99✓ ft. below m.p.

Time: 17:56

Depth to water prior to sampling: 6.99 ft. below m.p.

Time: 17:56✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-17

Well Use: Monitoring

Sample ID: MW-17

Sample Date: 4/20/05

Sample Time: 11:07 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.63 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 61.37 feet

Volume of Standing Water: 9.82 gallons

Volume to be removed: 29.46 gallons

Actual Volume removed: 30.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.3 gpm

Purge Start: 11:00

Purge Time: 7 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:02	10	5.01	0.149	2.9	14.2
11:04	20	5.03	0.148	2.8	14.1
11:06	30	5.02	0.147	2.9	14.1

Depth to water after purge: 4.66 ft. below m.p.

Time: 11:07

Depth to water prior to sampling: 4.66 ft. below m.p.

Time: 11:07 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05



# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-23

Well Use: Monitoring

Sample ID: MW-23

Sample Date: 4/20/05

Sample Time: 14:09

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.62 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.10 ft. below m.p.

Measuring Point (m.p.): PVC Casing

$\Delta$  h: 61.48 feet

Volume of Standing Water: 9.84 gallons

Volume to be removed: 29.52 gallons

Actual Volume removed: 31.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.9 gpm

Purge Start: 14:01

Purge Time: 8 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:03	10	6.19	0.188	3.1	13.6
14:06	20	6.19	0.187	3.2	13.5
14:08	30	6.21	0.187	3.6	13.5

Depth to water after purge: 4.74 ft. below m.p.

Time: 14:09

Depth to water prior to sampling: 4.74 ft. below m.p.

Time: 14:09

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-25

Well Use: Monitoring

Sample ID: MW-25

Sample Date: 4/20/05

Sample Time: 11:26

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.34 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 44.60 ft. below m.p.

Measuring Point (m.p.): PVC Casing

$\Delta$  h: 40.26 feet

Volume of Standing Water: 6.44 gallons

Volume to be removed: 19.32 gallons

Actual Volume removed: 20.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.3 gpm

Purge Start: 11:20

Purge Time: 6 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:21	5	5.04	0.127	3.8	13.6
11:22	10	4.94	0.127	2.9	13.7
11:24	15	4.95	0.127	2.8	13.7
11:25	20	4.95	0.124	2.8	13.7

Depth to water after purge: 4.39 ft. below m.p.

Time: 11:26

Depth to water prior to sampling: 4.39 ft. below m.p.

Time: 11:26

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: B-31

Well Use: Monitoring

Sample ID: B-31

Sample Date: 4/19/05

Sample Time: 14:19✓

## II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 5.65 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 60.35✓feet

Volume of Standing Water: 5.43 gallons

Volume to be removed: 16.29 gallons

Actual Volume removed: 17.00✓gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 1.9 gpm

Purge Start: 14:10

Purge Time: 9✓min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:12	5	3.71	0.140	6.1	13.7
14:15	10	3.39	0.153	6.2	13.7
14:17	15	3.39	0.157	6.4	13.7

Depth to water after purge: 5.65✓ft. below m.p.

Time: 14:19

Depth to water prior to sampling: 5.65 ft. below m.p.

Time: 14:19✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

**WELL SAMPLING  
LOG**

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

**I. General Information:**Client Name: Lenox China, Pomona, NJProject No.: 43838.002Project Name: TCE Quarterly MonitoringSampled By: RM/SKWell No.: B-32Well Use: MonitoringSample ID: B-32Sample Date: 4/19/05Sample Time: 13:51✓**II. Well Information:**PID Reading: -Well Diameter: 1.5 inchesStatic Depth to Water: 6.60 ft. below m.p.Measuring Point (m.p.): PVC CasingTotal Well Depth: 53.93 ft. below m.p.Measuring Point (m.p.): PVC Casing $\Delta$  h: 47.33 feetVolume of Standing Water: 4.26 gallonsVolume to be removed: 12.78 gallonsActual Volume removed: 15.00 gallons**III. Sampling Information:**

Purging Method:

☒ Peristaltic Pump☐ Submersible Pump☐ Bailer☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good☐ Poor☐ Other \_\_\_\_\_Pump Flow Rate: 2.1 gpmPurge Start: 13:44Purge Time: 7 min.**Purge Chemistry:**

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
13:46	5	3.62	0.196	4.9	14.7
13:48	10	3.34	0.203	5.3	14.5
13:50	15	3.29	0.201	7.2	14.1

Depth to water after purge: 6.65 ft. below m.p.Time: 13:51Depth to water prior to sampling: 6.65 ft. below m.p.Time: 13:51✓Sample Appearance: ☐ Turbid☐ Slightly Turbid☒ Clear☐ Other \_\_\_\_\_Sample Odor: ☒ None☐ Other \_\_\_\_\_**IV. Sample Analyses:**Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered☒ UnfilteredLaboratory: AccutestDate Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: B-53

Well Use: Monitoring

Sample ID: B-53

Sample Date: 4/20/05

Sample Time: 10:40

## II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 4.80 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 43.90 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 39.10 feet

Volume of Standing Water: 3.52 gallons

Volume to be removed: 10.56 gallons

Actual Volume removed: 15.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 2.5 gpm

Purge Start: 10:34

Purge Time: 6 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
10:36	5	5.00	0.092	6.17	13.3
10:38	10	4.90	0.103	5.36	13.3
10:40	15	4.90	0.103	5.52	13.3

Depth to water after purge: 4.73 ft. below m.p.

Time: 10:40

Depth to water prior to sampling: 4.73 ft. below m.p.

Time: 10:40

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: B-54

Well Use: Monitoring

Sample ID: B-54

Sample Date: 4/20/05

Sample Time: 9:45✓

## II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 4.65 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 43.60 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 38.95 feet

Volume of Standing Water: 3.51 gallons

Volume to be removed: 10.53 gallons

Actual Volume removed: 15.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.0 gpm

Purge Start: 9:40

Purge Time: 5 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:41	5	5.01	0.139	3.6	13.6
9:42	10	4.95	0.142	3.4	14.0
9:44	15	4.95	0.143	3.2	14.0

Depth to water after purge: 4.68 ft. below m.p.

Time: 9:45✓

Depth to water prior to sampling: 4.68 ft. below m.p.

Time: 9:45

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: B-59

Well Use: Monitoring

Sample ID: B-59

Sample Date: 4/20/05

Sample Time: 10:04

## II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 3.65 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 48.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 44.35 feet

Volume of Standing Water: 3.99 gallons

Volume to be removed: 11.97 gallons

Actual Volume removed: 15.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.8 gpm

Purge Start: 10:00

Purge Time: 4 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
10:01	5	4.99	0.132	4.1	13.2
10:02	10	4.90	0.136	3.8	13.2
10:03	15	4.90	0.136	3.8	13.2

Depth to water after purge: 3.69 ft. below m.p.

Time: 10:04

Depth to water prior to sampling: 3.69 ft. below m.p.

Time: 10:04

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: B-66

Well Use: Monitoring

Sample ID: B-66

Sample Date: 4/19/05

Sample Time: 14:38✓

## II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 5.37 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 64.92 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 59.55✓ feet

Volume of Standing Water: 5.36 gallons

Volume to be removed: 16.08 gallons

Actual Volume removed: 17.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 2.8 gpm

Purge Start: 14:32✓

Purge Time: 6 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:34	5	3.48	0.143	5.8	13.3
14:36	10	3.34	0.147	4.6	13.5
14:37	15	3.32	0.145	5.7	13.5

Depth to water after purge: 5.42✓ ft. below m.p.

Time: 14:38

Depth to water prior to sampling: 5.42 ft. below m.p.

Time: 14:38✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05



# WELL SAMPLING LOG

Gannett Fleming  
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Princeton, New Jersey 08540  
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(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: B-71

Well Use: Monitoring

Sample ID: B-71

Sample Date: 4/19/05

Sample Time: 15:01 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 5.95 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 53.20 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 47.25 feet

Volume of Standing Water: 4.25 gallons

Volume to be removed: 12.75 gallons

Actual Volume removed: 20 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 2.5 gpm

Purge Start: 14:53

Purge Time: 8 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:55	5	4.12	0.079	5.7	13.1
14:57	10	3.68	0.061	5.3	13.2
14:59	15	3.56	0.060	5.8	13.0
15:00	20	3.52	0.060	5.9	13.0

Depth to water after purge: 5.98 ft. below m.p.

Time: 15:01 ✓

Depth to water prior to sampling: 5.98 ft. below m.p.

Time: 15:01

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-72

Well Use: Monitoring

Sample ID: MW-72

Sample Date: 4/20/05

Sample Time: 8:26

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.99 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 15.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 10.51 feet

Volume of Standing Water: 1.68 gallons

Volume to be removed: 5.04 gallons

Actual Volume removed: 6.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 2.0 gpm

Purge Start: 8:23

Purge Time: 3 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
8:24	2	5.61	0.082	2.7	10.6
8:25	4	5.60	0.082	2.9	10.6
8:26	6	5.39	0.079	1.9	10.6

Depth to water after purge: 7.60 ft. below m.p.

Time: 8:26

Depth to water prior to sampling: 7.60 ft. below m.p.

Time: 8:26

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-73

Well Use: Monitoring

Sample ID: MW-73

Sample Date: 4/20/05

Sample Time: 8:44✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.10 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 13.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 9.40 feet

Volume of Standing Water: 1.50 gallons

Volume to be removed: 4.50 gallons

Actual Volume removed: 6.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 1.5 gpm

Purge Start: 8:40

Purge Time: 4 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
8:41	2	6.05	0.074	5.4	9.9
8:42	4	6.15	0.076	5.2	9.6
8:43	6	6.16	0.073	5.1	9.4

Depth to water after purge: 4.64 ft. below m.p.

Time: 8:44✓

Depth to water prior to sampling: 4.64 ft. below m.p.

Time: 8:44

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-74

Well Use: Monitoring

Sample ID: MW-74

Sample Date: 4/20/05

Sample Time: 8:58✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.22 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 13.65 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 9.43 feet

Volume of Standing Water: 1.51 gallons

Volume to be removed: 4.53 gallons

Actual Volume removed: 6.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 1.5 gpm

Purge Start: 8:54

Purge Time: 4 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
8:55	2	6.25	0.078	6.8	9.4
8:56	4	6.16	0.069	6.5	9.2
8:57	6	6.11	0.060	6.7	9.2

Depth to water after purge: 4.30✓ ft. below m.p.

Time: 8:58✓

Depth to water prior to sampling: 4.30 ft. below m.p.

Time: 8:58

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-75

Well Use: Monitoring

Sample ID: MW-75/MW-85

Sample Date: 4/19/05

Sample Time: 16:48 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 3.91 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 66.09 feet

Volume of Standing Water: 10.57 gallons

Volume to be removed: 31.71 gallons

Actual Volume removed: 32.00 gallons ✓

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 6.4 gpm

Purge Start: 16:43

Purge Time: 5 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
16:44	10	3.64	0.029	8.3	13.6
16:45	20	3.51	0.026	6.6	13.6
16:47	30	3.49	0.026	6.7	13.5

Depth to water after purge: 4.03 ft. below m.p.

Time: 16:48 ✓

Depth to water prior to sampling: 4.03 ft. below m.p.

Time: 16:48

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-76

Well Use: Monitoring

Sample ID: MW-76

Sample Date: 4/19/05

Sample Time: 16:30 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.57 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 65.43 feet

Volume of Standing Water: 10.47 gallons

Volume to be removed: 31.41 gallons

Actual Volume removed: 32.00 gallons ✓

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.2 gpm

Purge Start: 16:20

Purge Time: 10 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
16:23	10	3.42	0.132	7.5	13.6
16:26	20	3.47	0.139	5.5	13.6
16:29	30	3.50	0.143	5.0	13.6

Depth to water after purge: 4.64 ft. below m.p.

Time: 16:30 ✓

Depth to water prior to sampling: 4.64 ft. below m.p.

Time: 16:30

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals: ☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-77

Well Use: Monitoring

Sample ID: MW-77

Sample Date: 4/19/05

Sample Time: 16:10✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.62 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 65.38 feet

Volume of Standing Water: 10.46 gallons

Volume to be removed: 31.38 gallons

Actual Volume removed: 32.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 2.7 gpm

Purge Start: 15:58

Purge Time: 12✓ min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
16:02	10	3.11	0.060	7.9	13.5
16:05	20	3.14	0.056	5.7	13.5
16:08	30	3.17	0.054	6.6	13.5

Depth to water after purge: 4.62 ft. below m.p.

Time: 16:10✓

Depth to water prior to sampling: 4.62 ft. below m.p.

Time: 16:10

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-78

Well Use: Monitoring

Sample ID: MW-78

Sample Date: 4/19/05

Sample Time: 15:50 ✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 3.68 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 66.32 feet

Volume of Standing Water: 10.61 gallons

Volume to be removed: 31.83 gallons

Actual Volume removed: 32.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.2 gpm

Purge Start: 15:40

Purge Time: 10 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
15:43	10	4.31	0.061	9.2	13.8
15:46	20	4.22	0.057	7.7	13.8
15:49✓	30	4.20	0.055	4.7	13.8

Depth to water after purge: 3.69 ft. below m.p.

Time: 15:50 ✓

Depth to water prior to sampling: 3.69 ft. below m.p.

Time: 15:50

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05



# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-79A

Well Use: Monitoring

Sample ID: MW-79A

Sample Date: 4/19/05

Sample Time: 15:30✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.08 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 65.92✓ feet

Volume of Standing Water: 10.55 gallons

Volume to be removed: 31.65 gallons

Actual Volume removed: 32.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.6 gpm

Purge Start: 15:21

Purge Time: 9 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
15:33	10	4.32	0.170	5.0	13.1
15:25	20	3.95	0.157	5.2	13.0
15:28 ✓	30	3.87	0.157	5.4	13.0

Depth to water after purge: 4.10✓ ft. below m.p.

Time: 15:30

Depth to water prior to sampling: 4.10 ft. below m.p.

Time: 15:30✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-80

Well Use: Monitoring

Sample ID: MW-80

Sample Date: 4/19/05

Sample Time: 17:39✓

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 3.46 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 59.60 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 56.14 feet

Volume of Standing Water: 8.98 gallons

Volume to be removed: 26.94 gallons

Actual Volume removed: 30.00✓ gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 4.3 gpm

Purge Start: 17:32

Purge Time: 7✓ min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
17:34	10	3.49	0.137	3.7	14.5
17:36	20	3.54	0.137	3.6	14.4
17:38	30	3.56	0.138	3.7	14.4✓

Depth to water after purge: 3.46 ft. below m.p.

Time: 17:39✓

Depth to water prior to sampling: 3.46 ft. below m.p.

Time: 17:39

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

# WELL SAMPLING LOG

Gannett Fleming  
202 Wall Street  
Princeton, New Jersey 08540  
(609) 279-9140 (Telephone)  
(609) 279-9436 (Facsimile)

## I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 43838.002

Project Name: TCE Quarterly Monitoring

Sampled By: RM/SK

Well No.: MW-81

Well Use: Monitoring

Sample ID: MW-81

Sample Date: 4/20/05

Sample Time: 9:26

## II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.58 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 56.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 51.92 feet

Volume of Standing Water: 8.31 gallons

Volume to be removed: 24.93 gallons

Actual Volume removed: 30.00 gallons

## III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other \_\_\_\_\_

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other \_\_\_\_\_

Pump Flow Rate: 3.8 gpm

Purge Start: 9:18

Purge Time: 8 min.

## Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:20	10	4.82	0.070	4.4	12.3
9:23	20	4.81	0.070	4.5	12.3
9:25	30	4.82	0.071	4.5	12.4

Depth to water after purge: 4.64 ft. below m.p.

Time: 9:26

Depth to water prior to sampling: 4.64 ft. below m.p.

Time: 9:26

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other \_\_\_\_\_

Sample Odor: ☒ None

☐ Other \_\_\_\_\_

## IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 4/20/05

**APPENDIX B**

**CONTOUR MAP REPORT FORM**

**APRIL 19, 2005**

Drawing Description: Groundwater Flow Map, April 19, 2005**Contour Map Reporting Form**

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling events? Yes ☐ No ☒

If yes, attach new "Well Certification - Form B" and identify the reason for the elevation Change (damage to casing, installation of recovery system in monitoring well, etc.)

\_\_\_\_\_

2. Are there any monitoring wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ☒ No ☐

If yes, identify these wells.

P-1A, P-5A, P-8A, P-9A, MW-1, MW-3, MW-4, MW-6, MW-8, MW-9, MW-10, MW-11, MW-12S, MW-13, MW-14S, MW-16, MW-17, MW-23, MW-23A, MW-24, MW-25, MW-25A, B30A, MW-75, MW-76, MW-77, MW-78, MW-79A, B-31, B-32, B-53, B-54, B-59, B-66, B-66A, B-67, B-71

3. Are there any monitoring wells present at the site but omitted from the contour map? Yes ☒ No ☐

Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

Wells omitted from the map are screened in a shallower or deeper groundwater interval than that screened by the recovery well system.

4. Are there any monitoring wells containing separate phase product during this measuring event? Yes ☐ No ☒

Were any of the monitoring wells with separate phase product included in the ground water contour map? Yes ☐ No ☒

If yes, show the formula used to correct the water table elevation.

\_\_\_\_\_

Project No.: 43838.002Project Name: Lenox China, Pomona: TCE MonitoringDrawing Description: Groundwater Flow Map, April 19, 2005

5. Has the ground water flow direction changed more than 45° from the previous groundwater contour map? Yes ☐ No ☒

If yes, discuss reason for change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ☒ No ☐

Unless the ground water mound and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are the wells used in the contour map screened in the same water-bearing zone? Yes ☒ No ☐

If no, justify inclusion of those wells.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Were the ground water contours  
☐ computer generated,  
☐ computer aided, or  
☒ hand drawn?

If computer aided or generated, identify the interpolation method(s) used.

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